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MADRAS, Presidency

PLAN
of the Provinces of
MALABAR and CANARA.

32 24 16 0 0 32

Scale_ 32 Miles to an Inch.

Population and Extent in square miles of the several Collectorates according to the most recent investigation.

	Population.	Square Miles.
Malabar...	12,28,300.	6,060.
Canara.....	8,34,874.	7,720.
Total.	2,063,174.	13,780.

Madras Lith. Press

B. C. Royel. Delt.

REPORT,

ON

THE MEDICAL TOPOGRAPHY AND STATISTICS,

OF

THE PROVINCES OF MALABAR AND CANARA.

COMPILED FROM THE RECORDS

OF THE

MEDICAL BOARD OFFICE.

PUBLISHED BY ORDER OF GOVERNMENT.

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1844.

MALABAR AND CANARA.

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PLAN
of the
Fort and Cantonment,
of
CANNANORE.

Reference.

A. Church.
B. Magazine and Guard Room.
C. Burying ground.
D. European Barracks.
E. Fort.
F. Portuguese Church.
G. European Regimental Hospital.
H J. Sepoy Lines.
K. Places of Arms for 3 Regiments N.I.
L. Garrison Hospital.
M. Cantonment Bazars.

Scale.
100 500 1 2 3 4 5 6 7 8 9 1000 Yards.

Road to Bellipatam & Tanore

High road to Cantonment

Old Fort

Old Fort

Moply Burying Ground

Road to Town of Cannanore

Sea or Beach

Rocky Banks

Rocky Banks

Madras Lith. Press.

B.C. Regel, Delt.

MALABAR AND CANARA.

Situation boundaries &c.

The Province of Malabar and Canara, commonly called the western provinces, forms a narrow slip of country of great length, but of inconsiderable breadth, situated between the 10th and 15th degrees of north latitude, and between 74° 10′, and 76° 50′, of east longitude; the province is bounded on the north, by the Portuguese territory of Goa, on the south, by Cochin in Travancore; on the east, by the great range of western ghauts, which separate them from the Mysore country and Coimbatore in the southern division, and on the west, its shores are washed by the Indian ocean. The coast runs diagonally in a south-easterly direction, from Sedashegur on its northern extremity, to Cochin on the south, several headlands, and small bays being formed along its tract; the general character of the country is flat, and sandy near the coast, being intersected by numerous mountain streams flowing into extensive back-waters, inland it rises more or less abruptly to the foot of the ghauts, which are no where more distant than forty miles from the sea, though in general approaching much nearer, presenting a surface estimated at 13,780 square miles, with a population of 2,063,174 souls.

The principal towns and stations in the provinces, are Cannanore the capital, and chief military station; Tellicherry, Calicut, and Mangalore; a description of the climate will be found in the detailed reports for the principal stations.

CANNANORE.

General description of the cantonment &c.

The town and fort of Cannanore, are situated at the distance of a quarter of a mile from each other, the former at the bottom of a small bay, and the latter on a jutting portion of land, which forms one side of the bay. The town lies in N. latitude 11° 42′, and E. longitude 75° 27′ and is very populous containing many good houses, but

its streets are narrow and very filthy. The south-eastern aspect of the fort faces the sea; and the cantonment may not inaptly be compared in figure, to an irregular triangle, on the apex of which is placed the fort, the sides and base being occupied by garden houses, and buildings of various kinds. The Esplanade and European parade ground, which are of considerable extent, are contained in the area of the triangle. The European barracks are situated a few hundred yards west of the fort, and further on, in the same direction, is the European hospital, next to which is the medical depot, and then the mess house of H. M.'s. Regiment, the last public building in this direction of any note, being about a mile and a quarter distant from the fort. Between the buildings which have just been mentioned, and situated for the most part on a cliff rising from 40, to 60 feet above the level of the sea, are the garden houses of the officers of H. M.'s. Regiment. On the right hand,and in the north easterly direction are the church and burial ground, at the distance of about a quarter of a mile from the fort. In this direction also, and about a mile farther on, is the garrison hospital, between which and the church are scattered, without reference to order, numerous garden houses occupied by the European officers of the native regiments. Stretching between the garrison hospital, which may be called the extreme of the cantoment, in one direction, and the mess house of the Queen's regiment, the extreme in the other, is a line of officers' houses representing the base of the triangle, to which the cantonment has been likened. Immediately behind this line is the cantonment bazar, still further to the rear are placed the native barracks, hospital, and last of all the native lines.

Cannanore is surrounded by small hills and narrow valleys and is altogether free from any extensive reservoirs of stagnant water; cocoanut topes abound, and form one of the characteristic features of the place. They are seen between the officers' houses, surrounding the cantonment in every direction, and extending in the distance as far as the eye can reach; and the cantonment may be said to be imbedded in a forest of these

trees. There are a few rice fields within, and around the place, which are not considered prejudicial to health; as from the want of tanks, or other extensive reservoirs of water cultivation is confined to the monsoon season.

Soil. The soil is entirely composed of the debris of laterite, and is of a gravelly nature, forming a shallow covering to the rock itself. In few places is it more than one foot in depth, and in others, the bare rock appears. Though the laterite at some depth from the surface is soft like the clay of which bricks are made, it becomes hardened by exposure to the air, and is much used for building. The rock, near the sea shore, contains fossil shells imbedded in its substance.

From the porous nature of the soil, and sub-stratum of laterite, water is rapidly absorbed, and drained off; and in the course of a very short period after a heavy fall of rain, the surface becomes perfectly dry; there are therefore no accumulations of stagnant water to be met with.

Climate. The climate of Cannanore is mild, remarkably equable, and has been until lately very healthy.

The seasons may be conveniently divided into three viz. the cold, the hot, and the rainy or monsoon season. The cold season lasts from about the 1st of November, to the end of February; the hot from about the beginning of March, to the end of May; and the rainy, from the last mentioned period, to the beginning of November. The cold season can only be so called in a comparative sense, for it is rarely cold to the feelings, except perhaps for an hour or two in the very early part of the morning, during the occasional prevalence of a land-wind from the north-east, but the climate is never of a bracing character. This may easily be imagined from the fact, that the thermometer is seldom lower than 68°. The nights are dewy, and to the feelings of Europeans somewhat cool, the early part of the mornings occasionally foggy; and the days agreeably warm. Though the thermometer, during

the hot season, seldom indicates a greater degree of heat than 86°, still, at this time the climate is often very oppressive, particularly at night, when it is both close and hot; but a strong sea breeze moderates the heat during the day.

The approach of the rainy or monsoon season, which commences about the end of May, or beginning of June, and continues until the middle of October, is indicated by the appearance, in the south-west, of vast masses of clouds rising from the ocean, and advancing towards the north-east, accumulating and becoming more dense as they approach the land. The sky becomes darkened particularly towards night; the air from being calm and sultry, is agitated by violent gusts of wind; and vivid flashes of lightning, followed by loud peals of thunder, illuminate the heavens; amidst the commotion, rain at length commences to fall, and continues for several days in succession, after which the sky again clears and discovers the face of nature entirely changed; instead of parched fields, and withered grass, the whole surface of the country has become clothed in green. The air being cooled and purified by the rain, even animal life seems refreshed and invigorated. The rain continues to fall heavily during the months of June and July, with frequent intervals of from two or three hours, to a day or two; in August there is commonly a cessation for about twenty days; and again in September it falls heavily, and continues till about the 15th of October, after which it ceases nearly altogether; a violent thunder storm similar to that which ushered in the monsoon, usually preceding its departure.

During the intervals of rain, the air is often hot, close and moist, an atmosphere of steam seems to float around, and the respiration becomes as oppressed as in a vapour bath. Notwithstanding the violence of the monsoon, and the quantity of rain, there is, owing to the nature of the soil, as before described, but little interruption to the ordinary business of life, for in an hour or two after the heaviest rain, the public roads are passable for conveyances of all kinds; from this property of the soil, and the additional circumstance, that

there is rarely a day during the whole of the monsoon in which there is not an hour or two of fine weather, either in the morning or evening, the rainy season is not, as might be supposed, attended with much inconvenience or discomfort, indeed many prefer it to the other periods of the year.

Before quitting the subject of the rainy season, it may be remarked, that some preparations are necessary to encounter it with comfort; the majority of the houses on the Malabar coast being roofed with cadjan, which resists the rain better than tiles, require, before the setting in of the monsoon, to be newly thatched; or should the roofs be single tiled, these must be turned. Houses that are double tiled can alone be depended upon as water proof, and even these must be carefully looked to; conveyances, such as carriages, palanquins &c. must likewise be protected by cadjan covers from the rain, which would otherwise penetrate into them. All articles of clothing, not in constant use, must be carefully packed away to prevent their being destroyed, either by the dampness of the air, or by moths and other destructive insects, which abound at this season; on the occurrence of a day or two of fair weather, they should be exposed to the sun and repacked, especially all wollen articles, otherwise they would inevitably be destroyed by moths, notwithstanding their exclusion from the air. Silks, especially those of English manufacture, must receive more than ordinary care, as it is difficult, under the best management, to prevent their spotting. Even certain articles of food require attention; tea must be kept in well corked bottles, and sugar candy, in as dry a situation as possible, or it would be liable to be converted into syrup, articles of grocery, confectionary, and oilman stores, are peculiarly liable to destruction; in short there are few things of domestic use, that do not require the most vigilant care, to ensure their preservation.

Temperature and Thermometric range.

With respect to atmospheric moisture, as no hygrometrical observations have been made, a few of its general effects, may here be noticed. During the cold and hot seasons, Cannanore is not particularly damp,

but in the monsoon, as already mentioned, steel becomes rusted and even deeply corroded in an inconceivably short time; glued articles of furniture are apt to fall to pieces; and all such perishable articles, as imbibe moisture readily, are quickly destroyed, unless the greatest precautions are taken; wollen cloths first become saturated with water, and if neglected, speedily rot; paper, even with the greatest attention to its preservation, becomes damp and nearly useless; books are deprived of their bindings, hats of their fur, and varnished articles of their polish; any thing indeed susceptible of injury from moisture, is with difficulty preserved. Light fogs prevail during the rainy season, and for some short time after, and as the monsoon clears away, heavy dews succeed at night.

Annexed is a register of the thermometer in the shade, for the years 1836 and 1837, in which is shown the maximum, medium, and minimum range of every month. It will be seen on reference thereto, that the highest is 88°, and the lowest 67°, and that the medium temperature of the year is about 78°. It will also be seen, that the greatest monthly range 15°, occurs in the hot months, and that the lowest 6°. is in the monsoon season. The medium monthly range throughout the year being about $10\frac{1}{2}$°, and the annual range, about 21°

Pluviometer. The annual fall of rain is estimated at about 120 inches; but for the years 1835, 1836 and 1837, it averaged 124. The greatest quantity of rain registered in any one day was 6 inches.

State of the Pluviometer for the years 1835, 1836 *and* 1837.

	1835.	1836.	1837.
	Inches.	Inches.	Inches.
January.....	0	0	0
February.....	0	0	0
March.....	4-8th	0	0
April.....	4	0	0
May.....	7 4-8th	5 $\frac{7}{8}$	11 2-8th
June.....	62 $\frac{1}{8}$	45 $\frac{1}{8}$	30 4-8th
July.....	18 2-8th	22 2-8th	29 6-8th
August.....	14 $\frac{7}{8}$	19 6-8th	11 6-8th
September.....	9 6-8th	16 2-8th	10 2-8th
October.....	14 $\frac{1}{8}$	8	10 4-8th
November.....	0	6 $\frac{1}{8}$	14 $\frac{5}{8}$
December.....	0	0	0
Total....	131 $\frac{1}{8}$	123 $\frac{2}{8}$	118 $\frac{5}{8}$

Vegetable produce.

Besides cocoanut trees, which as already stated, are found in great number, various others are to be met with, such as the artocarpus integrifolia, or jack tree; the areeka catechu, or betel nut; the anacardium occidentale, or cachew nut; the mangifera indica, or mango; the musa-paradisiaca, or plantain, also flourishes here. Of creeping plants, there is a great variety, but the two most remarkable, and most cultivated, are the piper nigrum, or pepper vine, and the piper betel, or betel leaf plant. These may be seen encircling the jack and other trees, pepper being cultivated in sufficient quantity it is believed, for local consumption. Rice as already stated, is grown to a limited extent in the immediate neighbourhood of the cantonment, two crops being usually obtained in the monsoon. Besides the plantain and mango, pine apples abound, and attain a large size; they are easily reared and arrive at as high perfection, as in any other part of India. The hibiscus esculentus, or bandakai; the solanum melongena, or brinjal; the cucurbita hispida, or pumpkin; the cucumis sativus, or cucumber; the dioscorea sativa, or yam; the raphanus sativus, or radish; the trichosanthus anguina, or snake gourd; the convolvulus batatas, or sweet potatoe; the caladium esculentum, a much prized root, resembling the yam; together with the momordica charantia a vegetable much used by the natives, both in curry and fried, with a few others, are abundant. The herbage in the rainy season is

luxuriant but rank and coarse, and in a month after the heaviest monsoon it becomes dried up, assuming a russet brown appearance, as though no rain had fallen for months previously.

Exports and Imports. The following were the principal articles of export, and import, in the official year from April 1837 to April 38.

Exports.—Pepper, coir, rice, green gram, red betel nut, salt, cotton piece goods, shark's fins, poonspars, cotton, cocoanuts, deers horns, sugar, kopra or dried cocoanuts, sandal wood oil and white betel nut.

Imports.—Cotton, salt, coir, rice and paddy; wine and spirituous liquors, beer, wheat, copper, silk, soft sugar, spelter zinc woollens, millinery, dates, iron, tea, stationery, cotton thread, godawk, jaggery, perfumery, kopra, cocoanuts, cocoanut oil, moong, cuttary, tamarind, oil-man's stores, sugar candy, salt petre, camphor, coriander seed, saddlery, gun powder, onions, soap, dry dates and *kismisses.

The total value of imports for the year 1837, 38 amounted to 4,67,164 Rupees, and of exports to 3,12,050.

Population. The inhabitants of Cannanore are chiefly composed of *nairs*, *moplays*, and *teers*, but as no census has ever been taken, the relative proportion of these classes is not known; there is however reason to believe, that the moplays are the most numerous, and the teers the next. The moplays are traders, and comprise the moneyed part of the community; the teers who are the cultivators of the soil, are generally speaking poor; and the nairs, who may be said to form the aristocracy of the place, are an extravagant and dissipated race, and advantage has been taken by the moplays of their ruinous habits, to wrest from them nearly all their lands. The moplays have thus of late years, become the great landed proprietors.

The nairs are said to be a brave people, and of a high and

* Dried Currants from the Persian gulph.

independent spirit, compared with the moplays and teers, though when acting in concert, the latter are capable of acts of daring. As a body the inhabitants are a stout muscular race, and their appearance speaks favorably as to the salubrity of the climate; they are a lively people, and fond of active out door sports. The nairs and teers, are much addicted to the use of intoxicating liquors. The law of inheritance among the nairs is peculiar; married nair women being permitted to have free intercourse with any of the other sex, who are of equal, or higher rank; no nair therefore knows his father, in consequence of which, to ensure his own blood inheriting his property, the sister's children are the legal heirs. This law, or custom as well as several others, have been adopted pretty generally by the moplays, who came originally from Arabia. There is also a peculiar custom among the teers deserving of notice; which is, that their women appear in public, with the breasts uncovered; various reasons are assigned for this custom, but it is difficult to assign the true one, at the present day none but women of easy virtue among them cover their breasts.

The remaining portion of the inhabitants of the place, which are few in number, consist of *roman catholics, parsees,* and *hindoos*

Diet. Rice is the staple article of food with all classes of the natives; the poor however, are often obliged to content themselves with raggy and fish, on account of their cheapness; the latter being frequently neither of the best, nor of the most wholesome description; cocoanut oil being used by them, as a substitute for the more expensive article of ghee, the poor also eat cocoanuts scraped and boiled with rice, and consume large quantities of the fruit of the jack tree. With respect to animal food, beef is both good and cheap, and is freely used by the moplays; but mutton is of an inferior quality, and so expensive as to be out of the reach of the natives generally, as an article of food. Poultry is abundant and cheap. The high price of mutton together with its indif-

ferent quality, is usually a cause of complaint amongst the native troops, on their arrival at Cannanore from inland stations; this is occasioned by the distance from which sheep are brought, and the great mortality to which they are liable, from the rank quality, and scantiness of the herbage at different seasons of the year.

Prevailing diseases

The most prevalent diseases among the natives are fever, diarrhœa, rheumatism and cutaneous eruptions. Fever of the intermittent type, and almost exclusively of the quotidian form, prevails throughout the whole year; it would seem to owe its origin not so much to any local causes, as to the effect of malaria conveyed from the western ghauts by a strong, chilly east wind, which blows from an early hour in the morning, until near midday during the whole of the cold season. In the other seasons of the year fever is less frequent, and arises from the ordinary exciting causes. Generally speaking, intermittents are mild, often consisting of but two or three paroxysms, and seldom exceeding five or six; they are readily subdued by the administration of an emetic, followed by purgatives, except in the hot season when they are liable to be associated with biliary derangement; in such cases a repetition of the emetic, followed by mercurial alteratives, becomes requisite; bark in any form is seldom necessary. Cases of remittent fever are frequently admitted into hospital, though they rarely originate at the station. In almost every instance it is met with in individuals who had recently passed through the Wynaad jungle; in Europeans it assumes a severe, and at times a dangerous character, and requires at first the free use of the lancet; but in natives bleeding may generally be dispensed with. In both Europeans and natives however, active purgatives are indispensable, with the free administration of the sulphate of quinine, on a remission of the symptoms taking place; under this mode of treatment, remittents have hitherto proved very manageable. The quinine either diminishes the violence of the succeeding exacerbation, or

Fevers.

Treatment.

Remittents not endemic.

Effects of the quinine.

causes the disease to assume the intermittent type, after which the patient may be considered out of danger.

Diarrhœa though frequent amongst the natives, is not of a severe character, it is chiefly caused by the use of improper food, such as eating large quantities of cocoanut, jack fruit, bad fish, and other irritating and indigestible articles. A few doses of calomel and rhubarb are generally sufficient for its cure. Cutaneous eruptions are very prevalent, and scabies is thought by some to be more common, and more difficult of cure, than in most other parts of India; this however is not found to be the case on inquiry, but an eruption, ecthyma cachecticum, often mistaken for scabies is very difficult to cure, it is attributed by the natives generally to living almost exclusively on fish. This disease is occasionally attended with anasarca of the lower extremities, and is liable to be mistaken for scabies purulenta, from which affection however the absence of itching should distinguish it. The attempt to cure it by sulphur has been observed in some instances to occasion general anasarca, followed sometimes by inflammation of the lungs. *Herpes* (particularly *herpes circinatus*) *lepra*, *elephantiasis communis*, together with *elephantiasis Græcorum*, are also prevalent diseases on the malabar coast, and the three last may be said to be incurable.

Cutaneous disease.

With respect to epidemic diseases, small pox and measles make their appearance almost every year, but they rarely prevail with much violence. Until the year 183^{8}, cholera did not occur in an epidemic form at Cannanore for several years, it broke out however about the middle of June in that year, having previously appeared at Quilon, Calicut, Tellicherry and Mahé. It for the most part attacked the poor, amongst whom it was very fatal; and was most prevalent in the town and cantonment bazaar, in both of which situations there is a great want of cleanliness; whilst in the sepoys lines, which are on open ground, and kept remarkably clean, scarcely a single case of the disease occurred.

Small pox and measles annually.

Cholera.

The average quantity of rain fell in the months of June and July in that year, but it was remarked that longer intervals than usual of dry weather, occurred between the showers.

Hepatitis and Dysentery.

Hepatitis and Dysentery are not prevalent diseases except among the European soldiery, in whom they are not wholly referrible to climate.

Effects of Climate.

The climate of the malabar coast, which is very relaxing, is unfavourable to convalescence from acute disease, and patients but slowly and imperfectly regain their wonted health, and strength. To Europeans accustomed to a cold and bracing climate, a lengthened residence on the Malabar coast, has a relaxing effect, especially as the cold season of the year, is felt by them to be so, in little more than name ; it might also be supposed that owing to the exceeding dampness of the monsoon season, the climate would prove injurious to those subject to pulmonary affections, but as the very equable temperature throughout the rainy season, counteracts much of the deleterious effects, that dampness might otherwise give rise to, the reverse of this is found to be the case ; even common colds are less prevalent and milder, than in most other parts of India.

The military force stationed here consists of one European, and two native regiments, with one company of native foot artillery, and the usual number of camp followers.

Barracks.

The barracks of the European regiment occupy an elevated and open site,upon a plain, within about 500 yards of the beach, and 30 feet above the level of the sea ; they are built of laterite and tiled, the ground on which they stand is a red porous soil.

The building which is of a quadrangular form, having four different entrances, consists of eight apartments, four of these being 216, and four 168 feet, in length, the breadth and height being, 20 and 13 feet, respectively. There are two lateral

court yards and a central one, within the area. The serjeants quarters, regimental school and canteen, are distinct buildings, in the side courts.

The principal rooms of the barracks have verandahs on both sides, six feet broad and seven high, the whole affording ample accommodation for a regiment of the average strength. The doors and windows are placed opposite to each other, but in consequence of being furnished with wooden shutters, instead of venetians, the ventilation has been complained of as defective.

Water. There is an abundant supply of water of good quality on the premises, and the soldiers perform their ablutions in earthen vessels placed in the verandahs.

Hospital. The hospital is situated at the distance of half a mile from the barracks, on an elevated piece of ground, 350 yards from a cliff, which overhangs the neighbouring low grounds, or valley. It is built of similar materials, but admits of being much better ventilated, from having windows which may be partially kept open, according to the state of the weather. The walls are lofty, and the principal part of the building has a double verandah all round, and the whole is surrounded by a high wall enclosing a spacious area for exercise. The accommodation in the chief building which is in the form of a cross ✝, and elevated three feet above the surface of the ground consists of one large and two small wards, the former 112, and the latter, 34 feet in length each; the breadth and height being 20, and 17 feet respectively. There is also another ward, in a detached building about 150 feet from that above described, which is 98 feet in length, by 20 in breadth, and 13 in height, having a narrow verandah on one side. Store rooms, cooking apartments, a dead house and necessaries, the latter communicating with the hospital by an enclosed passage, are likewise attached, but in separate buildings.

Garrison hospital. The Garrison hospital at Cannanore consists of three distinct buildings, so arranged with respect to each other, as to leave a small quadrangular space of

ground in the centre. They are formed of mud and stone, have double tiled roofs, and are placed on an open elevated spot of ground, at the south-east extremity of the cantonment, sufficiently removed from other houses, and from the bazaars. One of the buildings, that allotted to the European sick, may be described as consisting of too long wards placed at right angles with each other. The second is similar in external appearance to one of the wards just alluded to, running in a parallel direction. The fourth side of the area is completed by a building facing directly south. Of the wards forming the part appropriated to the European sick, one is 61, and the other 41 feet in length, by 18½ in breadth, and the walls are 12 feet in height; the wards communicate with each other by an open arched way, and are well ventilated, having twelve large windows, with three doors between them, except on the northern face, and at the ends, which terminate in blank walls; these wards are surrounded by verandahs, two of which on the south, and that on the east side are enclosed, that on the west is open, and supported on large brick pillars; the depth of the enclosed verandahs is about 7 feet, and of the open one to the west 12 feet; the wards are thus well protected from the south west monsoon. The second building is divided into three unequal apartments, the largest of which, formerly used as a bath room, has recently been occupied by sick convicts, next to this is an apartment 18½ feet in length, by 15 feet in breadth, which is at present a store room; the third apartment 26 feet in length by 15 in breadth, forms the surgery, where the medicines are also kept. The third building being the front of the garrison hospital, is appropriated for the reception of the native sick; it is 37 feet in length, by 26 feet in breadth, and surrounded on the three outer sides, by an enclosed verandah 10 feet 9 inches wide. Two rooms are taken off the verandah, in one of which the assistant apothecary resides; the walls of the hospital are 14½ feet in height, and it is well ventilated by means of doors and windows; and the outer walls of all the enclosed verandahs have large windows, furnished with wooden shutters.

There are two cookrooms, and two necessaries attached to the garrison hospital; the cookrooms adjoin each other, and are placed in the rear of the ward occupied by sick convicts; one being for the use of the European, and the other for the native sick.

The necessary for the European sick, is immediately in the rear of the European wards, and that for the natives at the distance of about 50 yards from the hospital. A supply of good water on the spot is much required, none being at present procurable except from a distance; the floors of the hospital which are of mud, should also for the sake of cleanliness, be chunamed.

Hospitals for Native Corps.

The hospitals for the native corps are built on an uniform plan, they are of brick and mortar, and furnished with a sloping double tiled roof, each consisting of one ward 98 feet in length, by 18 in breadth, and 10 feet high, they have an open verandah 7½ feet wide on the northern face, but none on the other sides; two small rooms are enclosed off the verandahs, one at either extremity, and serve as a store room, and surgery; the hospitals are furnished with doors, but no windows; in the rear of each, at a distance of about 30 yards, there is a small cookroom, and a necessary.

Meteorological Observations for the year 1836, *shewing the prevailing winds, &c. for each month.*

Months.	Thermometer in the Shade. Maximum	Medium.	Minimum	Winds.	REMARKS.
January.....	81	75	68	N. E.	Land winds occasionally strong, succeeded by sea breezes in the afternoon—no dews.
February.....	84	78	69	N. E.	Weather in general clear, without dews, the regular land winds and sea breezes prevailed.
March.....	88	81	73	N. E. and S. W.	Weather dry, alternate sea and land breezes prevailed.
April.	88	85	78	N. N. W. and S. W.	Morning calm, afternoon strong breezes from the N. W. and S. W. sultry and oppressive, heavy showers of rain, on the nights of the 25th and 26th.
May.....	88	84	76	N. E. S. W. and N. W.	Dry till the 15th, when heavy rain, fell again from the 15th to 29th, except some partial shower.
June.....	84	78	73	W. and S. W.	45⅛ inches rain fell—wind strong from the westward and south west.
July.....	84	77	73	W. N. W. and S. W.	Winds west N. W. and S. W. strong gales with heavy rain the first half of the month, and mild open weather the latter half—22¼ inches of rain fell.
August.....	79	76	73	Westerly.	The break of the monsoon commenced in July, and continued until the middle of the month, since which the rain has fallen abundantly, with occasional high winds from the west,
September.....	81	79	75	N. E.	Heavy rain and wind in the beginning of the month, as it advanced, the weather became clearer, and on conclusion open and dry—land winds occasionally blowing.
October.....	84	80	73	S.	Alternate land and sea breezes, the former from the southward; weather clear in the beginning of the month, cloudy towards the latter end, threatening rain.
November.....	84	78	73	S. E.	Some refreshing showers in the beginning of the month, the remainder dry and sultry, land wind oppressive by day, cool in the mornings and evenings—dews.
December.....	82	78	73	E. by W.	Winds from the eastward in the mornings and westerly in the after-noon—no dews or rain.

Meteorological Observations for the year 1837, *shewing the prevailing winds, &c. for each month.*

Months.	Thermometer in the Shade. Maximum	Medium.	Minimum	Winds.	WEATHER.
January.....	84	82	71	N. E.	Alternate land and sea winds prevailed, the former beyond their ordinary extent, slight dews in the evenings and mornings.
February.....	84	80	72	S. E.	Land and sea breezes pretty regular, the former less severe and the latter much from the southward, dews very slight.
March.....	88	84	77	S. W.	Land wind ceased, nights very close, strong sea breezes.
April.....	88	85	79	N. E. & S. W.	Weather extremely sultry, strong and steady sea breezes during the day, nights clear.
May.....	88	82	75	N. E. & S. W.	Weather at the commencement of the month very sultry, frequent showers until the 25th, when the monsoon regularly set in—11⅜ inches rain fell.
June.....	88	78	75	N. W. & S. W.	Weather various and showery, 30½ inches of rain fell.
July.....	80	77	75	N. E. & S. W.	Monsoon favorable, and average fall of rain, winds moderate.
August.....	78	76	74	S. W.	Partial showers of rain, temperate, cool and agreeable.
September.....	88	81	75	N. E. & S. W.	Weather serene, nights rather close, 10½ inches of rain fell during the month.
October.....	83	79	75	W.S.W.S.W & N. E.	The beginning of the month was characterized by very heavy falls of rain, in the middle and termination, it proved very dry.
November.....	85	80	74	N.E.N.N.E. & S. W.	The beginning of the month rainy, and highly tempestuous, at the close of the S. W. monsoon, towards the end of the month land winds prevailed.
December.....	82	78	67	N.E.W.S.W. &S. W.	Land wind rendered the mornings during the month very cool, the days in general excessively hot.

C

Tables of diseases amongst the troops stationed at Cannanore, both European and native, with some remarks, are given at the end of the report of this division; but before concluding these observations, it may be necessary to notice those amongst the prisoners in the jail.

Jail.

Convicts only are kept at Cannanore, and they are confined in one of the casements of the fort, measuring 163 feet by 27, which consists of two arched apartments, eleven feet high, parallel to each other and divided by a central wall; they communicate freely with each other by large openings, and they are both well ventilated. The extent of accommodation, diet, labour &c. are shewn in the general statement appended, as in the preceding divisions. The sick are accommodated in one of the wards of the garrison hospital.

The following table shews the nature, and amount of disease and mortality, which have occurred amongst the prisoners, from 1831 to 1841 inclusive.

The average annual numerical strength has been only 46, and the admissions 65, or nearly 139 per cent.; the number of deaths annually has averaged 3, or nearly $4\frac{1}{2}$ per cent. on the strength.

The most numerous admissions have been from *bowel complaints, fevers, thoracic diseases and rheumatism*; and the mortality has chiefly resulted from *bowel complaints and fevers*, nearly one half of the total number of deaths having been occasioned by *diarrhœa and dysentery*. The principal cause of these acute diseases, mentioned by the medical officers, has been exposure to the sudden heavy falls of rain, during the south-west monsoon.

JAIL OF CANNANORE.

No. 1.—*Table exhibiting the number of Admissions and Deaths, of the Convicted Prisoners, from each class of disease, for* 10 *years.*

* During which period no prisoners were located in this Jail.		From 1831 to 1841 exclusive of second half of 1838 and 1839*. Aggregate strength 469.				Admissions & Deaths from each class of Disease.				Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
CLASSES.	DISEASES.	1st Half.		2d Half.		1st Half.		2d Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers	Febris ephemera	25	0	25	0	44	2	38	3	82	5	17 ·483	6 ·097
	,, intermit quot	18	1	12	3								
	,, remittens	1	1	1	0								
	,, com. cont	0	0	0	0								
	Cholera	0	0	5	2	0	0	5	2	5	2	1 ·066	40 ·000
Diseases of the Abdominal viscera	Diarrhœa	16	3	11	4	86	5	64	8	150	13	31 ·982	8 ·666
	Dysenteria acuta et chronica	8	2	8	4								
	Obstipatio	17	0	22	0								
	Dyspepsia	42	0	22	0								
	Hœmorrhois	3	0	1	0								
	Hepatitis	0	0	0	0								
Diseases of the Lungs	Catarrhus	20	2	18	0	22	2	18	0	40	2	8 ·528	5 ·000
	Pneumonia	2	0	0	0								
Eruptive Fevers	Variola	2	2	0	0	5	2	13	0	18	2	3 ·838	11 ·111
	Varicella	3	0	13	0								
Dropsies	Anasarca	2	0	2	0	0	0	5	0	5	0	1 ·066	0 ·000
	Ascitis	0	0	3	0								
Rheumatic affections.	Rheumat. acutus et chronicus	31	0	43	0	31	0	43	0	74	0	15 ·778	0 ·000
Venereal affections	Syphilis primitiva	1	0	0	0	4	0	2	0	6	0	1 ·279	0 ·000
	,, consecutiva	0	0	0	0								
	Gonorrhœa	1	0	0	0								
	Hernia humoralis	2	0	1	0								
	Strictura urethræ	0	0	1	0								
	Atrophia	0	0	3	2	0	0	3	2	3	2	0 ·639	66 ·666
Diseases of the Skin	Morbi Cutis	9	0	2	0	9	0	2	0	11	0	2 ·345	0 ·000
Do. ,, Eye.	,, Oculorum	6	0	8	0	6	0	8	0	14	0	2 ·985	0 ·000
	Other diseases	112	2	131	1	112	2	131	1	*243	3	51 ·812	1 ·234
	Total	319	13	332	16	319	13	332	16	651	29	138 ·806	4 ·454

Note.—Per centage of deaths to strength, 6·119.

* Of this number 118 were cases of ulcus.

TELLICHERRY.

Situation and general description.

Tellicherry, situated in North latitude 11° 44′, and East longitude 75° 31′, is a small station in the province of Malabar, 15 miles south of Cannanore, with the western ghauts to the east, and the ocean forming its boundaries on the west.

It was formerly a place of some consequence, was defended by a fort garrisoned by European troops, and withstood several attacks made upon it by Hyder Ally, whose attempts were thoroughly defeated by a vigorous sally, conducted by Major Abington in 1782.

The situation of Tellicherry is admitted to be very beautiful, being backed by wooded hills, interspersed with valleys, and watered by a fine river. Its healthiness is however its chief recommendation, though delicate Europeans suffer from the dampness of the climate. This station like others on the coast, is under the influence of the south west monsoon. The average fall of rain is from 120, to 140 inches.

Natural break-water.

The existence of a natural break-water at Tellicherry, formed by a reef of rocks extending about 472 yards in length, and running parallel with the shore, at the distance of about 614 yards, deserves notice, there being sufficient depth of water within it, for a ship of 5 or 600 tons to ride at anchor. As the wind and current prevail very much from the north west, during what is called the south west monsoon, the water is not so smooth upon the beach immediately opposite these rocks, as it is a little to the south of them; and it has been suggested that they would form an excellent depôt for coals for steamers, but an accurate survey of this part of the coast is still much required.

Produce.

A soil so abundantly watered, cannot be otherwise than very productive, yielding in some places three, and in many two crops of rice annually. Pepper forms one of the

principal articles of commerce, it requires little labour in its culture, but gives employment in gathering it, to a large proportion of the inhabitants. The cocoanut tree is the next article of general utility, and profit to the people; it grows in abundance along the whole coast, and the uses it is applied to, are very various, of the tree itself small boats are occasionally made, and also frames for houses,rafters, &c; the leaves are used for thatching, making mats, and baskets; the nut affords food, oil, and charcoal; and large quantities of coir rope, are made from the outer rind; lastly though not of slight estimation among the natives, toddy is obtained from the tree by incision. Fish oil is likewise an article of considerable commerce.

Inland, great varieties of wood are found, from the teak to the bamboo. The areca catechu, is also very abundant, as likewise the piper betel; ginger and arrow root are indigenous, and a considerable quantity of the latter, is prepared at this place for the English market.

At a short distance from Tellicherry there are some plantations the property of a gentleman, who has very successfully cultivated the cinnamon, and coffee plants.

The other exports consist of cardamoms, sandal wood and cloth, the produce of the eastern part of the district.

The markets are tolerably well supplied with fish, which with rice cooked in various forms, and vegetables, constitute the principal articles of diet.

The population amounts to about 20,000; of whom moplays form the largest proportion, nairs, tiers, and mackwas comprising the remainder.

Dwellings. The houses are for the most part built of unbaked bricks and thatched; among the more opulent natives however, laterite which is obtained in many parts of the district, is employed in building.

The only furniture used in native dwellings, is a charpoy or cot, with a few cooking utensils.

Habits. The male part of the population incur but little expense in their attire, and females are also but slightly clad, and exposure of the breasts is considered a mark of chastity. They practice ablution, and afterwards anoint the body with oil, and are generally a healthy and robust race of people tolerably free from disease, cutaneous eruptions being the most common of their complaints. As they are permitted to carry knives about their persons, they frequently wound each other in drunken brawls.

Diseases. Slight fever prevails during the changes of the seasons, but readily yields to simple remedies. Small pox occasionally rages with much violence, notwithstanding a vaccine establishment is kept up. Cholera carried off vast numbers in the months of May, June and July of 1838, and in such visitations the natives, (particularly moplas), ascribe little or no efficacy to medicine.

Police &c. The police duties are conducted by a Sudr Ameen under the general superintendence of the magistrate of the district. An auxiliary court, and likewise the provincial court of the division are held at this station ; the former is abundantly occupied with civil suits, the inhabitants being exceedingly litigious. The citadel or fort in which are situated Jail. the jail and hospital, is built on a rising ground close to the sea, and about forty feet above its level. It is of an oblong shape being 117 yards in length and 34 in breadth; its length runs parallel to the sea shore. The whole of the north west side of the citadel is occupied by a lofty building, the upper part of which is appropriated to the criminal court and offices, and the lower part forms the jail, in which the prisoners are confined. The rooms are spacious, airy, from 11 to 12 feet in height, clean and well secured; the prisoners are classed in the various apartments according to the nature of their crimes ; the whole is calculated to contain about 300 persons. See table at the end of the report, for diet, clothing, &c.

The hospital, a tiled building, occupies the southern angle of the citadel, and faces north east, with a verandah in front ;

it consists of three wards and a dispensary, and can accommodate forty patients. It is well ventilated, and the walls are lofty. Cooking rooms and apartments for commissariat supplies are attached, and also two necessaries which are so constructed as to project over the eastern angle of the fort; the ordure falls into a drain, which during the dry season is cleansed daily by the prisoners, and in the monsoon the rush of water keeps it clean.

The military hospital is a small building on the opposite side of the fort, and is capable of accommodating from ten to fifteen men; from the little sickness in the detachment of sepoys doing duty here (about 100 men) it has been found amply sufficient.

The following table exhibits the nature and amount of disease and mortality, which have occurred amongst the convicted prisoners during a period of 12 years, from 1829 to 1840 inclusive. The prisoners waiting for trial have been so few in number, that it has not been thought necessary to give the usual table of sickness amongst them.

The annual numerical strength has been somewhat under 100, and the admissions into hospital, have averaged nearly 180 per cent, 90 of whom however were from trifling complaints, as ulcers and cutaneous diseases. The deaths have averaged three annually, or 1·840 per cent on the sick treated. The most numerous admissions have been from *fevers, bowel complaints, eruptive fevers and rheumatism;* and the greatest mortality has resulted from *bowel complaints, cholera and fevers.*

In 1832 and 1838, cholera occurred in an epidemic form at this station, but in both years very few prisoners were affected; in 1832, thirteen cases with five deaths took place, and in 1838, only one man was admitted, and he died.

This jail has always been considered to be particularly healthy, and which is ascribed to its locality, its being well ventilated, and to the ample room afforded to the inmates; for

with regard to diet, clothing, labour and exposure out of doors, all prisoners, as mentioned in the previous report, are placed in nearly equal circumstances.

JAIL OF TELLICHERRY.

No. 2.—*Table exhibiting the number of Admissions and deaths of the Convicted Prisoners, from each class of disease for* 12 *years.*

CLASSES.	DISEASES.	From 1829 to 1840 inclusive. Aggregate strength 1191. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers.....	Febrisephemera	153	0	202	2								
	,, intermit quot.	86	0	49	1								
	,, remittens....	1	1	0	0	241	2	253	5	494	7	41 ·477	1 ·417
	,, com: cont...	1	1	2	2								
	Cholera.....	3	1	16	8	3	1	16	8	19	9	1 ·595	47 ·368
Diseases of the Abdominal viscera.....	Diarrhœa.....	44	2	37	3								
	Dysenteria acuta et chronica.	4	1	8	1								
	Obstipatio.....	34	0	38	1	92	4	95	6	187	10	15 ·701	5 ·347
	Dyspepsia.....	9	1	10	0								
	Hœmorrhois....	1	0	1	0								
	Hepatitis.....	0	0	1	1								
Diseases of the Lungs.	Catarrhus.....	5	0	1	0								
	Asthma.....	3	0	2	0	8	0	3	0	11	0	0 ·923	0 ·000
	Phthisis pulmonalis.....	0	0	0	0								
Do. of the Brain.....	Apoplexia.....	1	1	1	1	2	1	2	2	4	3	0 ·335	75 ·000
	Mania.....	1	0	1	1								
Eruptive Fevers.....	Variola.....	14	5	3	1								
	Varicella.....	63	0	77	0	80	5	80	1	160	6	13 ·434	3 ·750
	Rubeola.....	3	0	0	0								
	Erysipelas.....	0	0	0	0								
Dropsies....	Anasarca.....	4	0	5	1	4	0	6	1	10	1	0 ·839	10 ·000
	Ascitis.....	0	0	1	0								
Rheumatic affections.	Rheumat. acutus et chronicus.	46	0	48	0	46	0	48	0	94	0	7 ·892	0 ·000
Venereal affections..	Syphilis primitiva.....	7	0	17	0								
	,. consecutiva..	0	0	0	0	8	0	20	0	28	0	2 ·350	0 ·000
	Gonorrhœa.....	1	0	3	0								
Specific diseases.....	Lepra.....	0	0	0	0								
	Scorbutus.....	0	0	0	0								
	Scrophula.....	0	0	0	0	0	0	0	0	0	0	0 ·000	0 ·000
	Dracunculus....	0	0	0	0								
Diseases of the Eye..	Morbi Oculorum.....	19	0	24	0	19	0	24	0	43	0	3 ·610	0 ·000
Do. ,, Skin.	,, Cutis.....	23	0	37	0	23	0	37	0	60	0	5 ·037	0 ·000
	Other diseases..	500	1	509	2	500	1	509	2	1009	+3	84 ·718	0 ·297
	Total..	1026	14	1093	25	1026	14	1093	25	2119	33	177 ·917	1 ·840

Note.—Per centage of deaths to strength, 3·274.

* Of this number 661 were cases of ulcus.

† Two deaths under the head ulcus, and one under the head wounds and accidents.

DISTRICT OF CALICUT.

Boundaries, situation, extent. This district is bounded on the north and north east, by the Coorumbanaad talook and the Yellatoor river ; on the east by the ghauts, and the high range of Wanootumally ; on the S. E., by the Punvymallay range, and the Coliatoor river ; on the south, by the Beypore river ; and on the west by the sea ; its whole perimeter being 109 miles, containing a superficial area of 261 square miles ;—about 40 of which are estimated as being under wet cultivation, 20 are occupied by villages and topes, and 100 consist of low hills, some of which are bare of wood, and others covered with jungle, the remaining parts of the country to the east, being forests and mountain land ; the higher grounds are usually laid out in terraces for the cultivation of dry grains, and the valleys for rice.—In figure its shape is very irregular, being in length about 28 miles, while it varies in breadth, from two and a half miles about its centre, to seven or eight at each extremity.

Population. *Nairs, Numboories Maplays,* and *Teers* predominate in the district, comprising about two thirds of the population, which amounts at present to a total of 78,593 ; the town of Calicut itself having a population of about 20,000. The Portuguese inhabitants are reckoned at 523 ; and the proportion of Hindoos to Musselmauns, is estimated at 30 of the former, to 100 of the latter.

Villages. The district is divided into 12 *hobillies,* these being again subdivided into 12 *unshoons ;* and it contains 128 villages.

Town of Calicut. The town of Calicut, lies to the south of Cannanore, being in N. Latitude 11° 15,′ and E. Longitude 75° 50′ ; it is but little raised above the level of the sea,

and is of considerable extent from the houses being much scattered, and its being divided into several small estates ; it consists of one extensive street, about three fourths of a mile in length, with small cross streets leading from it. To the south, extending to the river, is a dense population of maplays, in which quarter of the town there are numerous mosques; to the N. W., lies the Portuguese part of town, composed of a number of streets, with respectably built houses, in its vicinity is a roman catholic church, and a large tank ; facing the sea is the custom house, with the dwellings of the European gentry; towards the east part of the town there is a beautiful tank of fresh water about 200 yards square, built of granite, and is the principal drinking water used by the inhabitants both European and native; on the N. W. is the Collector's cutcherry, near to which is a small parade ground for the detachment of native infantry, and also the sepoys lines, which are open to the sea breeze.

The jail is situated in the Portuguese town, to the north of which is the English burial ground.

The houses within the town are built chiefly of laterite, some being tiled, whilst others are thatched with cocoanut leaves ; the namboories and nairs live in gardens in its vicinity, which are usually enclosed with a mud bank and ditch, their houses being very generally built under the shade of trees.

The higher classes of the people are cleanly in their persons, but the slaves and lower castes, are extremely negligent in this respect, and are much subject to cutaneous diseases.

Beypore. The town of Beypore lies about six miles south of Calicut, on the right bank of the river of that name, and is one of the principal depôts for teak timber.

Roads. There are several good roads, which afford safe and easy communication for all kinds of land carriage; and there being but little surf on this part of the coast, small craft

can traffic with facility. The ports and passes are however nearly all shut from 1st June, to the end of August, during the prevalence of south west monsoon.

Mountains. The country extending eastward to Padanutum, and the southern portion of the Palavoge sub-division is open, the hills in these parts having generally smooth sides, with ledges of rocks running along their crests; the most conspicuous of these is Poupauray, eight miles east of Calicut, which has a ledge of large rocks on the summit, impregnated with iron; farther to the eastward, the face of the country becomes covered with dense forest trees, which extend to the ghauts. The lofty range of mountains called Wanootumally, separating this district from Wynaad and Ernaad, contains large quantities of teak and other timber, and also bamboos, which are floated down the rivers to Calicut and Beypore during the rains.

The principal rivers are the Yellatoor, which rises in the mountains near Poonoor-desum, and discharges itself into the sea after running a devious course of 34 miles; another stream which has its principal source in the Wavool mountains, flows in the direction of Tiruvambuddy and Kutratoor, and joins the Beypore river east of Pavoor, after running a course of 23 miles, generally through forests; it is navigable for small boats from its confluence up to Annaykurin, where it is joined by a large mountain stream. A third river also rises in the ghauts, in the vicinity of Tambercherry, and passing by that place, joins the Beypore river 12 miles from the sea. Travellers proceeding to visit the Neilgherries from Calicut, by the Koondah pass, may proceed to Arriacode by water, (the distance being a few miles less than the road, viâ Manjerry-vandore,) from whence the top of the pass by the new road, is distant about 27 miles; but as yet the only bungalow on this line of road is one in bad repair, at the top of the pass. The banks of the rivers generally, are thickly wooded and precipitous inland, but have a gentle slope near the sea; some of them are infested with alligators, and the fish in general, with which they abound, are said to be wholesome.

Tanks and wells. There are no lakes in the district, but tanks and bowries are numerous, particularly in the town of Calicut, and well supplied with water; the cultivators however depend almost entirely upon the rains, for the water necessary for their crops.

Drains. The town of Calicut is well drained, the channels being built of stone; those proceeding from the jail are 3 feet deep, and 6 inches broad, being made thus narrow, to prevent the possibility of the prisoners escaping through them; they are all open at top, except where they pass through thoroughfares.

Climate. A general description of the climate of this coast has already been given in the report for Cannanore, from which that of Calicut does not materially differ. It may

Salubrity of Calicut. be mentioned however, that Calicut is considered a healthy station, for notwithstanding that much water lodges in the vicinity during the rains, the salubrity of the atmosphere does not, in consequence of the nature of the soil, appear to be affected thereby; in some situations however, noxious exhalations arise during the month of November, when the rain water is nearly all evaporated, and the sun begins to act on the decaying vegetable matter.

Soil. Near the sea, the soil consists of a light brown sand; on the hills in the interior, it is red and gravelly; in the cultivated valleys, it consists of a mixture of red and brown earth, and in wooded situations, it is a black mould.

Vegetable products. The productions are rice, dry grains and pulse, of various sorts, cocoanuts, areka or suppary nuts, sessamum, pepper, turmeric and arrow root.

Cotton. Cotton is but partially cultivated, the only talooks in which it is grown to any extent being Cavay, Cherikul and Kotiste, and the produce in these is very limited; the plant is never watered, and both its quality and quantity, depend upon seasonable rain. The hill cotton of this district

is considered to be of good quality, but no pains appear to be taken in the cultivation of it, although cotton land in Malabar, is exempted from land tax.

Turmeric. Turmeric is grown in small quantities by most of the inhabitants in the interior, wherever the soil is found to be sufficiently rich for the purpose; in the talooks of Shernaad, Ernaad, Calicut and Coorumbanaad, where it is largely cultivaed, it seems to flourish without being either manured or irrigated in a soil consisting of sand and red clay; the quantity of this article annually exported from Malabar, varies from 400, to 1,300 candies.

Sandalwood. Sandal-wood is only found in the neighbourhood of a village in the Neilgherry talook, called Davaraypatam, and in small quantity in Wynaad; it is of spontaneous growth, and has never been attempted to be planted, or brought under cultivation; in 1837, the number of full grown trees amounted to about 600, which might be calculated to yield 24 candies of wood, i. e. 640 lbs each candy.

Sappan-wood. Sappan-wood, which affords a red dye, is only planted in garden or other fences, the reason of this seems to be a prevailing opinion, that it exerts a baneful influence over other trees, or shrubs growing in its vicinity. It may be reared from seed in almost any soil, but evidently grows best on a gravelly bed mixed with the common reddish clay; the seeds are sown before the rains, aud the plants require to be watered during the dry season, till two or three years old; the trees are fit to be cut after 10 or 12 years, before which they are of little value; the wood is sold at from 8, to 15 rupees per candy.

Coffee. Coffee is not much cultivated, there being but two or three places where it is grown to any extent, though a few shrubs are to be found in most private gardens. It has been grown at Anjarikandy and Wynaad, (under the immediate superintendence of Europeans,) where it thrives well, though there does not appear to be any thing peculiar in the

character of the soil at these places. It requires a rich loam, and shade from the sun's direct rays, with careful digging around the young plants, and plentiful watering every other day, till they begin to bear, which they do in the third year; afterwards, less moisture is requisite, but the roots should be manured annually, to ensure good crops.

Cocoanuts. The average produce of Cocoanuts in the whole of Malabar, is estimated at from 3 to 400 millions annually, which are valued at half a million of rupees, but in addition to this, from 20 to 25,000 candies of *copra*, (or dried unshelled nuts) are exported, valued at rupees 4,00,000.

Pepper-vines. Few pepper vines are found in Calicut, but in the other parts of the province of Malabar, pepper yields a considerable revenue; the exportation of this article during the years 1833, 34, 35 and 36, amounted to 54,698 candies.

The rice lands undergo repeated ploughing from August till October, in order to make the soil light; the seed of the first sort of rice, is sown in March, and transplanted in the months of May and June, the crops being usually reaped between August and the end of October; the second sort is sown in June, and transplanted in July and August, the harvest months being December and January; a third sort called *poonjah*, which is generally cultivated in *parambas*, is sown in the month of May, and the harvest collected in July and August. Gingely seed is sown in the month of August, and the harvest gathered in December and January. Sugar cane is planted in February, and cut down in November and December. Thama corn is sown in May, and reaped in July and August. Sweet pumpkin, brinjal, bandakois, country beans and other vegetables, are to be had throughout the year in situations having a command of water. Areka-nuts the produce of the areka-palm are also produced throughout the year; ginger and turmeric, are cultivated in October and November, and pepper-vines yield their harvest in December and January.

Animals. The domestic cattle of the country, such as bullocks, cows, buffaloes, goats and asses, are of inferior growth, sheep brought from the country on the other side of the ghauts, do not thrive here, and those bred in Malabar are but few. The sheep imported fromGuzerat, Mocha and other places, which are usually stall fed, continue healthy and preserve their size, whilst unmixed with the country breed. Common fowls, geese, turkey sand ducks are abundant.

Mineral productions. Iron ore is procured in several places, particularly in some low hills in the immediate neighbourhood of Calicut. Gold is found more or less in all the rivers of Malabar ; those which yield it in the largest quantities are the Todakall river, the Artiparambar, a rivulet which joins the Todakall, and the Arnaykur river, but the Cureatode stream, which joins the Arnaykur river, yields the purest gold. In 1833 a committee was appointed by order of government, to report on the productiveness of the mines at Nellambore, a village situated on the Beypore river, about 30 miles in a direct line, and in an easterly direction, from Calicut, by whom the following opinion was recorded ; that the productiveness of the mines was by no means such as to warrant the requisite outlay in working them, from the very doubtful prospect of profit, and independently of this, the unhealthiness of the climate in which the mines are situated, would make it uncertain whether any European possessed of sufficient knowledge to superintend the mining, could be induced for any salary, to remain in their neighbourhood throughout the year.

Roads and communications. The high northern road runs in a parallel line with the sea, (from which it is distant about half a mile,) to the Yellatore ferry 7½ miles from Calicut; it is sandy, and lined with trees on both sides. The inland road, via Munjerry, strikes off to the left, one mile from Kulaya bridge, and proceeds in a south easterly direction to the ferry, it is also sandy and lined with trees ; the road to the Tambercherry pass runs over a hilly country, to Pudanellum.

Diseases. The chief and perhaps only disease endemic in the district, is the Malabar ulcer, which is generally combined with Elephantiasis; it chiefly attacks the extremities, but sometimes the face, leaving the subjects of it dreadful objects; although it does not resemble cancer in appearance, yet in its effects and resistance of all remedial measures, it is not unlike that disease. The victims of it,—for it is generally in the end fatal—are of the poorest class of natives, who live on bad rice and fish, dwell in wretched huts, and in narrow filthy streets overflowed with rain during the monsoon.

Among the same class of people, as well as the prisoners in jail, anasarca, diarrhæa, and dysentery occur, on the approach of the monsoon, particularly the two former diseases, which in many cases prove fatal. Cholera has occasionally been epidemic, as in the latter part of 1833, the beginning of 1835, and again in 1838. Measles of a mild description appears, as in other places, generally during the cold season following the monsoon; and chicken pox is met with at all periods of the year.

Jail. The jail is an oblong square building, surrounded by a double wall, 12 feet high, the entrance to which is on the N. E.; at each corner of the square are placed watch towers, communicating with each other, by which the jail is completely overlooked; it has seven large and well ventilated wards, 12 feet in height, six of which are 43 feet by 21, and one 28 by 21, besides smaller apartments, and solitary cells; small walled courts 45 feet by 32, have been built within the square, to prevent the different classes of prisoners communicating with each other, in each of which is a well; a small stone basin has been constructed in the floor of each ward, to serve as urinals, for the convenience of the prisoners at night, which communicate with open drains in the inner courts. The men have access to the courts at all times during the day, but are locked up at night. The jail is capable of accommodating 600 prisoners.

Jail Hospital. The hospital, an upper storied building constructed of laterite, is situated 60 yards behind the jail, and 260 from the sea, it was formerly part of a Danish factory, and is enclosed by a high wall. A considerable space of ground between the two buildings, which are separated by a wall, is used as a work yard. There are four rooms on the ground floor, one of which is used as the dispensary, and two others are set apart for lunatics. The upper story is composed of three rooms, having boarded floors, the principal being 30 feet by 20, with one on either side, measuring 26, by 15 feet. The hospital is capable of accommodating 100 patients. The ground on which it is built is sandy, and its upper-story is freely exposed to the sea-breeze, but owing to the outer wall, the rooms below are confined.

Native Military Hospital. The hospital for the native detachment, is directly behind the wall surrounding the jail hospital; being well situated, open to the sea-breeze, and distant half a mile from the sepoys lines; it is a long thatched building, 52 feet in length, raised eighteen inches above the ground, and capable of accommodating 25 patients.

Statistics of crime in the province of Malabar. A considerable decrease in the number of crimes and misdemeanors, in the province of Malabar, occurred in 1835 and 36, as compared with 1834. Out of a population of 1,140,916 souls, contained in a superficial area of 6,262 square miles, the total number of crimes in 1834, amounted to 1,023; and in 1835, to only 714, being a decrease of 309; in 1836, the total number was 648, or 66 less than in the preceding year. The number of murders ascertained to have been committed in 1834, was fifty, whilst in 1835, there were only 44; but if four murders, on the Neilgherry hills be deducted, the number which actually occurred in Malabar is 40, or 10 less than in 1834. Of the murders committed in 1835, no less than thirteen were occasioned by the objectionable eastern custom, so prevalent throughout Malabar, of carrying knives; for this weapon being always at hand, it is often used on the slightest provocation. Murders are also frequently committed from jealousy, arising

from the illicit intercourse between the sexes, common amongst the Nairs; and which under the present deplorable state of the morals of these people, sanctioned by custom from time immemorial, it is difficult, if not impossible, to abolish.

Remarks on the following tables.

The annual numerical strength of the convicts has averaged during the eleven years 232, and the admissions into hospital have been 428, or 183·615 per cent; the number of deaths annually during the same period has been 28, or 12·090 per cent on the strength, the total admissions being 4708, the deaths 310, from an aggregate strength of 2564.

This average of sickness has been pretty uniform throughout the whole period, but occasionally it has been increased especially in the 2d half of the year 1836; when, in the months of November and December the state of the sea both at this station and at Tellicherry, was very unwholesome; it sent forth a strong stench of putrifying matter, and deposited a black mud on the sand. For many yards from the shore, the water was covered with dead fish, and on the beach, they were lying in large heaps; the effluvia arising from which extended over the station, and almost every person was more or less ailing,—fever, headach and nausea were the general complaints.

In 1833 and 1838, the mortality greatly exceeded the average above mentioned, the deaths amounting in these two years to 46 and 75 respectively; the increase in both years was occasioned by cholera; no less than 25 deaths took place in the second half of 1833, from 36 admissions, and 41 from 67, in the first half of 1838.

The most numerous admissions have been from *fevers, bowel complaints, and eruptive fevers,* and the greatest number of deaths have been produced by *bowel complaints, cholera, fever, and dropsies;* 5-6ths of the whole mortality having been caused by these diseases alone. The same diseases have also been most prevalent amongst the prisoners waiting for trial, and have occasioned 45 deaths, out of 51, nearly 9-10ths of the total mortality, see table No. 4.

Bowel complaints, especially diarrhœa and anasarca are the most untractable diseases met with in this jail, and they are also, as has been already mentioned very frequent amongst the inhabitants on this part of the coast. One of the medical officers in a report dated 3d December, 1833, speaking of diarrhœa, says "Most of the admissions were accompanied from the commencement of treatment with oedematous feet and emaciation, and the patients for the most part stated, that they had been affected with purging for two or three days previous to their coming into hospital"—and in a report dated 31st December, 1836, another medical officer writes, "Many of the cases of diarrhœa were attended with anasarca, and which was the immediate cause of death in the greatest number of the fatal cases" the same officer speaking of anasarca, under the same date, says "It is by far the most fatal disease, and is more frequent than the returns would lead one to suppose, for several cases of fever, dysentery and diarrhœa were accompanied, or became complicated with anasarca, and which cases were generally fatal." "It commences with a slight puffiness of the cheeks, in a short time the legs begin to swell, then the skin over the anterior part of the trunk becomes affected; this goes on increasing for three or four weeks, till at length the chest or the abdomen becomes the seat of effusion and causes death. The pulse is generally feeble and frequent, the tongue whitish, the urine scanty and skin dry, the bowels generally loose especially as the disease advances."

A third medical officer talking of "anasarca" in a report dated 31st December 1841, says "this disease generally runs a rapid and uncontrollable course, on this part of the coast, to a fatal termination either from effusion into the thorax or diarrhœa, and many of the inhabitants die from the disease after a short duration."

Both these maladies may be looked upon as diseases of debility, in many instances the sequelæ of malarious fever; and in their treatment tonics are essentially necessary along with the other medicines usually employed in these complaints.

JAIL OF CALICUT.

No. 3.—*Table exhibiting the Number of Admissions and Deaths of the Convicted Prisioners, from each class of disease for eleven years.*

CLASSES.	DISEASES.	From 1829 to 1840 exclusive of 1831. Aggregate strength 2564. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers.....	Febrisephemera	89	1	131	4								
	„ intermit quot	222	20	282	12	327	26	451	17	778	43	30 ·343	5 ·527
	„ remittens....	16	5	37	1								
	„ com. cont....	0	0	1	0								
	Cholera.....	75	45	80	44	75	45	80	44	155	89	6 ·045	57 ·419
Diseases of the abdominal viscera.....	Diarrhœa.....	203	24	223	28								
	Dysenteria acuta et chronica.	87	15	93	24								
	Obstipatio.....	19	0	72	1	353	39	434	54	787	93	30 ·694	11 ·817
	Dyspepsia.....	38	0	42	0								
	Hœmorrhois....	6	0	4	1								
	Hepatitis.....	0	0	0	0								
Diseases of the Lungs.	Catarrhus.....	52	6	98	3								
	Asthma.....	2	0	3	1	55	7	101	4	156	11	6 ·084	7 ·051
	Phthisis pulmonalis.....	1	1	0	0								
Diseases of the Brain.	Epilepsia.....	1	0	1	1								
	Paralysis.....	0	0	1	0	2	0	5	1	7	1	0 ·273	14 ·285
	Mania.....	1	0	3	0								
Erupfive fevers.....	Variola.....	13	4	3	1								
	Varicella.....	179	1	187	0	203	5	190	1	393	6	15 ·331	1 ·526
	Rubeola.....	9	0	0	0								
	Erysipelas.....	2	0	0	0								
Dropsies...	Anasarca.....	41	13	69	17	44	14	71	18	115	32	4 ·485	27 ·826
	Ascites.....	3	1	2	1								
Rheumatic affections.	Rheumat. acutus et chronicus.	75	6	104	3	75	6	104	3	179	9	6 ·981	5 ·027
Venereal affections...	Syphilis primitiva.....	7	0	6	0								
	Gonorrhœa.....	2	0	3	0	11	0	14	0	25	0	0 ·975	0 ·000
	Hernia humoralis.....	2	0	5	0								
Specific diseases.....	Lepra.....	0	0	0	0								
	Dracunculus....	1	0	0	0								
	Elephantiasis...	1	0	0	0								
	Atrophia.....	3	1	6	4	6	1	6	4	12	5	0 ·468	41 ·666
	Scrophula.....	0	0	0	0								
	Scorbutus.....	1	0	0	0								
Diseases of the eye...	Morbi Oculorum.....	17	0	11	0	17	0	11	0	28	0	1 ·092	0 ·000
Do „ Skin.	„ Cutis.....	110	0	87	1	110	0	87	1	197	1	7 ·683	0 ·507
	Other diseases..	842	10	1034	10	842	10	1034	10	*1876	+20	73 ·166	1 ·066
	Total..	2120	153	2588	157	2120	153	2588	157	4708	310	183 ·615	6 ·584

* Of this number 714 were cases of ulcus.

+ Seven under the head ulcus, seven under the head vulnus sclopitorum et incisum, three under the head punitio—who died from dropsy and anasarca—one contusio, and two under the head inflammation external.

NOTE.—Per centage of deaths to strength 12 ·090.

JAIL OF CALICUT.

No. 4.—*Table exhibiting the number of Admissions and Deaths of the prisoners waiting for trial, from each class of disease for eleven years.*

CLASSES.	DISEASES.	From 1829 to 1840 exclusive of 1831. Aggregate strength 697. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers.	Febrisephemera	1	0	4	0								
	,, intermit quot	27	3	17	3	30	5	33	6	63	11	9 ·038	17 ·460
	,, remittens....	2	2	12	3								
	,, com. cont....	0	0	0	0								
	Cholera.....	8	7	5	3	8	7	5	3	13	10	1 ·865	76 ·923
Diseases of the abdominal viscera.....	Diarrhœa.....	14	2	23	7								
	Dysenteria acuta et chronica.	11	1	10	7	30	3	38	14	68	17	9 ·756	25 ·000
	Obstipatio.	1	0	4	0								
	Dyspepsia.....	4	0	1	0								
Diseases of the Lungs.	Catarrhus.....	0	0	5	0								
	Asthma.....	1	0	0	0								
	Phthisis pulmonalis.....	0	0	0	0	1	0	6	1	7	1	1 ·004	14 ·285
	Pneumonia.....	0	0	1	1								
	Mania.....	3	1	2	0	3	1	2	0	5	1	0 ·717	20 ·000
Eruptive fevers.....	Variola.....	0	0	3	0								
	Varicella.....	22	0	8	0	26	0	11	0	37	0	5 ·308	0 ·000
	Rubeola.....	4	0	0	0								
Dropsies....	Anasarca.....	5	2	5	5	5	2	5	5	10	7	1 ·434	70 ·000
	Ascites.....	0	0	0	0								
Rheumatic affections.	Rheumat. acutus et chronicus.	5	0	3	0	5	0	3	0	8	0	1 ·147	0 ·000
Venereal affections...	Syphilis primitiva.....	5	0	2	0	7	0	3	0	10	0	1 ·434	0 ·000
	Gonorrhœa.....	2	0	1	0								
	Atrophia.....	2	1	0	0	2	1	0	0	2	1	0 ·286	50 ·000
Diseases of the eye...	Morbi oculorum.....	1	0	0	0	1	0	0	0	1	0	0 ·143	0 ·000
Do ,, Skin.	,, Cutis.....	25	0	55	0	25	0	55	0	80	0	11 ·477	0 ·000
	Other diseases..	33	1	58	2	33	1	58	2	*91	+3	13 ·056	3 ·296
	Total..	176	20	219	31	176	20	219	31	395	51	56 ·671	12 ·911

NOTE.—Per centage of deaths to strength 7·317.

* Of this number 35 were cases of ulcus.

+ Including one death from vulnus incisum, one from icterus and one sudden death from vomiting of blood, probably aneurism.

CANTONMENT OF MANGALORE.

Situation and general description of the station, and its vicinity.

Mangalore, the principal civil and military station in Canara, is situated in East longitude 75° 4′, and in North latitude 12° 50′; it stands in the immediate vicinity of the sea, from which it is separated by a back-water, which is here formed by the junction of the Bolar, a large river arising in the ghauts, and flowing in a westerly direction past Buntwall; and the Baloore, which takes its origin in the same range, but traverses the country in its way to the coast, by a more northerly course. During the rainy season, these rivers, which surround two sides of a peninsula on which the town of Mangalore and cantonment stand, bring down a large body of water, which renders them navigable for boats of some burthen for a considerable distance inland; in the dry-season however, there is little or no stream in either, except that caused by the influence of the tide, which flows to about nine or ten miles from their mouths. The banks of these rivers, particularly that which runs by Buntwall, are steep and high, while their beds from being rocky near their sources, as they approach the coast, are composed chiefly of sand or gravel; little or no clay is deposited in the back-water, except in that part of it immediately under the cantonment, where there is an extensive, and deep bed of alluvium, resulting from the meeting of the two rivers. The banks of these rivers also, unlike most others in this country, which are covered with rank vegetation, are on the contrary where the soil permits, either planted with cocoanut trees, or laid out in gardens or rice fields.

On the cantonment side of the back-water, and immediately under some high ground, is a level belt of land which surrounds the peninsula, varying in breadth from one to two hundred yards, or thereabouts, and but little raised above the surface of the sea; on the southern extremity it is converted into rice fields, or thickly planted with cocoanut trees

and from that point northward, along the edge of the back water, the larger portion of the fishermen and labourers about the place reside. At the back of the present landing place, and on a continuation of the ground now alluded to, the great bazaar commences, and extends north on the edge of the back-water, about half a mile. It is built without attention to regularity, and there is a general want of neatness and cleanliness observable, with but few indications of its possessing much wealth; there is nevertheless a considerable native trade, carried on at the place, during the period of the coast being open for shipping. In this low situation, which the cantonment overlooks, good water is only procurable in the dry-season, and it is always more or less impregnated with iron, from the laterite through which it percolates; the small tanks in the neighbourhood are seldom dry, though in the hot weather, they become covered with slimy vegetable matter.

Appearance of surrounding country.

The general appearance of Mangalore, immediately above the belt of cocoanut trees, between it and the back-water, presents from sea, or from the distant high grounds, rather a picturesque scenery; the houses are detached, particularly those towards the north end, on separate hills, from which an extensive view is to be had, while as far as appearance is concerned, the quantity of jungle and brush-wood, on the sides of these eminences, and in the intervening valleys, add much to the beauty of the place. Immediately beyond the cantonment however, the general appearance of the country becomes considerably altered, the hills attain a greater elevation, and assume a barren, and more rugged aspect, and seem to produce little else than a scanty grass, used by the natives for thatch; or here and there patches of stunted cashew-nut trees, anacardium occidentale, and scrubby low jungle.

Cultivated valleys, and produce.

The valleys in this neighbourhood, like those throughout the country are the parts principally under cultivation; here they open towards the sea in a westerly direction, and contain, a deep rich soil, evidently

the debris of the higher grounds; much trouble appears to be taken in rendering them as productive as possible, and in many places where circumstances are favorable, the proprietor of the soil is recompensed by reaping three separate harvests, from the same field within the year, though a difference in the quality of the grain of each crop is observable; that produced immediately after the monsoon being the most abundant, and the finest grain. In addition to rice, the cultivation in this neighbourhood is confined to pepper, betel nut, and the different kinds of vegetables, which are usually found in every Indian bazaar; which from advantage being taken of the favorable nature of the soil, and command of water, are procurable in the markets throughout the greater part of the year. The higher ground being composed entirely of laterite, either in the shape of rocks, or gravel, from which every particle of soil appears to be washed away, is totally unfit to support any kind of vegetation except the poor grass, and stunted jungle already mentioned.

The greater part of the rice raised in the surrounding country, is exported to different Arabian ports, particularly to Muscat.

Roads. The communications between the different villages, and the roads generally throughout the district, are of the worst possible description; in fact beyond the immediate precincts of Mangalore, where, from the quantity of convict labour available, they are kept in repair, it is impossible for a wheeled carriage to travel in any direction; consequently the produce of the interior is brought to the coast, by the rivers which intersect the country.

Population. The population of the Mangalore talook, including that of the town, which of itself contains 11,548 inhabitants, according to a census taken in 1836 is as follows;

Hindoos.			Mahomedans.			Christians.			Total.		
Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
41,348	38,762	80,110	4,403	4,305	8,736	4,404	4.154	8,558	50,183	47,221	97,404

The majority of the inhabitants are agriculturists, and the land of any value, is portioned out into small patches, the property of private individuals. The natives are generally well clad, have houses of a superior description to those seen in other parts of the country; and the poverty and wretchedness, existing in many of the towns to the southward, is not here met with.

There is a school at each of the roman catholic churches, under the management of private individuals, supported principally by the civil officers at the station, and the parents of the scholars, who are either of Portuguese descent, or native christians; the latter amount to no fewer, in Canara, than 21,502, and those located here, are by far the most respectable class of natives about the place; they were originally brahmins from the Concan, who were forcibly converted to christianity, it is supposed, by the Portuguese at an early period; and though they still retain many of the customs of their original caste, such as refraining from eating the flesh of the cow, &c. they are nevertheless extremely observant of the rites, and ceremonies of the romish church.

Harbour of Mangalore.

Considerable changes have taken place in the harbour of Mangalore within the last 40 years, which have not only injured it much, in a commercial point of view, but probably may at the same time, have had some influence in rendering the station less healthy, than it was formerly known to be. The harbour was of much greater extent and depth, than it now is; the old jetty and neighbouring stone dyke, which were constructed for the purpose

of preventing the encroachment of the sea, being now almost buried in sand, and although the tide rises 4 feet 5 inches on the bar at springs, the native craft are obliged to anchor in the narrow channels of the rivers; while between these and the shore, a flat tract of mud is now exposed at every ebb tide, or has so little water covering it in some places, as to prevent the smallest canoe from approaching the landing place. These changes in the state of the harbour, appear to have originated in the first place, from an opening having been made by the natives, through a narrow part of the back sand, to the northward of the present outlet, to permit the escape of the freshes in the river, which had caused alarm, in consequence of their having at one time, risen to a greater height than usual; into this the sea made an entry, and independent of producing the changes alluded to, has formed an extensive and permanent opening.

Climate. With respect to the climate of Mangalore it differs but little from that of the other stations on the western coast. The coldest months are those at the close, and beginning of the year, when the thermometer generally ranges between 65° and 75° F., during the 24 hours. The wind blows steadily, during the most part of this season, from the eastward, or a little to the north or southward of east; towards its close however, after calm weather, the land wind frequently comes on in gusts, which are exceedingly unpleasant, and wither up every thing of a vegetable nature. Though the diurnal variation of the thermometer, is by no means great, yet, the sudden changes of temperature which occur at times, particularly during the night, or towards morning, occasion a degree of cold, which makes a blanket often requisite, and agreeable. Between the coast and the ghauts leading into Mysore and upper Coorg, which are seen in the distance, about 40 miles in a direct line from Mangalore, there are no particular obstacles to break, or alter the current of the land wind, consequently it is much stronger, and steadier here, than further to the southward, where the ghauts approach much nearer to the coast, and are less elevated.

During the cold season, a cloud is seldom seen; the soil becomes caked, and vegetation parched up from the extreme dryness of the atmosphere, while at this time, although it may communicate to some a bracing and invigorating feeling, the generality of people complain of not being in as good health at that season, as at other periods of the year.

Towards the month of March, the heat begins sensibly to increase, and the thermometer stands at from 80°, to 86° in the shade, while in the open air at 2 P. M., it rises to 95° or 100°. As the monsoon period however approaches, and the land and sea breezes decline, or become variable and light, the mercury, within doors, for the most part stands at about 90°, during the day; and falls but little below this point in the night, until after the occurrence of a few showers of rain which usually precede the monsoon, when the sultry state of the atmosphere become immediately moderated; and as soon as the periodical rains, have fairly set in, the temperature ranges between the 75 and 82 of F.'s scale. The monsoon sets in with as great regularity at Mangalore as on other parts of the western coast; the earliest date at which the rains commenced, during a period of 11 years immediately preceding 1837, was on the 9th May 1835, and the latest was on the 10th June 1832; cholera prevailed as an epidemic, in the town and neighbouring country in the latter year. The fall of rain has varied but little as to quantity, throughout the eleven years and averaged 128 inches annually.

The climate of Mangalore, is generally considered by strangers, as having a relaxing and debilitating effect, and Europeans arriving from above the ghauts, for the most part feel a disinclination and inability to take their accustomed exercise; whilst the natives of the place on the other hand, consider the climate as particularly favorable to health.

The only documents kept at Mangalore which have reference to the health of the inhabitants of the town, are those in the hands of the priests of the principal roman catholic

church; these, which are kept up, it is believed with accuracy, exhibit the following results, from the year 1827 to 1836 inclusive. During the period mentioned, the average number of parishioners attached to this church were 2,738, the casualties amongst whom, in that time, have amounted to 681, being at the rate of 76 per annum, or in the proportion of 2, 7-10 per cent. Notwithstanding an opinion is entertained to the contrary, Mangalore is by no means unfavorable to the health of natives, either born at the place, or coming as sepoys generally do, from above the ghauts; but to the European constitution, on the other hand, the climate does not appear so well adapted, although from the want of materials from which to draw any just conclusions, no very decided opinion can be formed on this subject; it is however found to be very unfavorable to the recovery either of European or native strangers, who may fall sick while residing here, particularly when the tone of the system has been lowered to any great degree; convalescence is exceedingly tedious, and unsatisfactory, and a change of climate, in all such cases, becomes necessary; and where this cannot be taken advantage of, as often happens in the case of sepoys, atrophy followed by dysenteric symptoms, and anasarca supervene, which in a few months carry off the patient.

Military Cantonment.

The cantonment is situated on the north side of the village of Mangalore; the ground on which it stands is pretty level, and gently rises in elevation, until it reaches the place of arms, the centre and the highest part; from this the ground slopes on all sides, except towards the north east, where the elevation is continued, and is lost amongst the hilly ground in that direction.

Sepoys lines.

The sepoys lines are built on the southern side of the parade ground, with merely the high road intervening, the situation being open to the sea breeze, well raised, and easily drained in the monsoon. The huts, which are built of clay, lie in parallel lines east and west, and are thatched with grass. Good water is not procurable in the lines them-

selves, owing to their elevation, though a deep tank has been dug for the purpose of affording a supply, it is however procurable at a short distance.

Hospital. The hospital which was originally intended for the sick of two regiments, is situated in a compound at the north east end of the lines; it is well raised, dry, airy and capable of accommodating upwards of 60 patients; the building stands north and south, and is divided into three compartments, the centre or larger one measuring 81 feet in length, by 16 in breadth; while the end wards, which communicate with the former by folding doors, measure 23 by 16; three sides of the building are surrounded by a verandah 9 feet in breadth, the ends of the front verandah being partitioned off, and used as dispensaries; and tatties are placed in front of the verandahs to keep out the rains during the monsoon; there is a cookroom and necessary in the rear of the building, the latter being connected with the hospital by a covered passage. See table No. 22 for diseases.

Jail. The jail is an extensive tiled building in the form of a square, erected on an elevated piece of ground, and presenting a front of 240 feet. It is built of stone and divided into twenty apartments, ten of which are appropriated for the male convicts, two for females, one as an hospital, one as a convalescent ward, two for lunatics, one for the dispensary, and the remaining three as store rooms. All the apartments are 16 feet in breadth, but vary in length from 105 to 12 feet. The whole is calculated to accommodate 500 persons. The walls are thirteen feet in height from the floors, which are of mud, and raised three feet above the level of the surrounding yard, the drainage is therefore good, and all the rooms are perfectly dry. All the doors measure 7 feet by 4, and the windows 6 by 3 feet; the latter are strongly secured by iron bars, and have stout plank shutters, opening outwards, but which are seldom closed except to keep out the rain; all the rooms are considered to be well ventilated.

A stone wall eighteen feet high surrounds the jail, at the distance of 34 yards, thus forming a spacious enclosure, in which are the cookrooms and other out offices, and five wells of excellent water; the civil prisoners and those waiting for trial are also permitted to take exercise in this enclosure.

The hospital, convalescent ward and dispensary form one angle of the building; the hospital measures 90 feet by 16, and can accommodate sixty patients; the convalescent ward measures 52 feet by 16, and is calculated to contain forty persons.

For diet, clothing, labour &c. see statement at the end of the report.

The following tables shew the nature and amount of disease and mortality, which have occurred amongst both classes of prisoners during a period of ten years; they exhibit the diseases classified, and point out the percentage of sick to strength, and of deaths to the number of sick treated.

JAIL OF MANGALORE.

No. 5.—*Table exhibiting the number of Admissions and Deaths of the Convicted Prisoners from each class of disease, for ten years.*

CLASSES.	DISEASES.	From 1829 to 1839 exclusive of 1831. Aggregate strength 2109. 1st Half Ad.	1st Half Dd.	2d Half Ad.	2d Half Dd.	Admissions & deaths from each class of disease. 1st Half Ad.	1st Half Dd.	2d Half Ad.	2d Half Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers	Febris ephemera	192	0	361	5	500	16	705	7	1205	23	57 ·136	1 ·908
	,, intermitquot.	300	12	340	2								
	,, remittens.	0	0	0	0								
	,, com. cont.	8	4	4	0								
	Cholera	88	49	71	39	88	49	71	39	159	88	7 ·539	55 ·345
Diseases of the Abdominal viscera	Diarrhœa	1226	69	1820	97	1436	88	2087	109	3523	197	167 ·046	5 ·591
	Dysenteria acuta et chronica	151	19	190	11								
	Obstipatio	55	0	73	0								
	Dyspepsia	1	0	0	0								
	Hœmorrhois	1	0	3	0								
	Hepatitis	2	0	1	1								
Diseases of the Lungs	Catarrhus	0	0	0	0	14	1	7	0	21	1	0 ·995	4 ·761
	Asthma	14	1	7	0								
	Phthisis pulmonalis	0	0	0	0								
	Pneumonia	0	0	0	0								
Diseases of the Brain	Apoplexia	1	0	1	1	2	0	3	1	5	1	0 ·237	20 ·000
	Epilepsia	0	0	1	0								
	Mania	1	0	1	0								
Eruptive Fevers	Variola	3	1	11	2	55	1	77	2	132	3	6 ·258	2 ·272
	Varicella	50	0	64	0								
	Erysipelas	2	0	2	0								
Dropsies	Anasarca	5	3	3	0	13	6	11	1	24	7	1 ·137	29 ·166
	Ascites	8	3	8	1								
Rheumatic affections	Rheumat. acutus et chronicus	32	0	36	0	32	0	36	0	68	0	3 ·224	0 ·000
Venereal affections	Syphilis primitiva	9	0	5	0	9	0	5	0	14	0	0 ·663	0 ·000
	,, consecutiva	0	0	0	0								
	Gonorrhœa	0	0	0	0								
Specific diseases	Lepra	0	0	1	0	184	51	116	40	300	91	14 ·224	30 ·333
	Dracunculus	0	0	1	0								
	Atrophia	74	47	89	40								
	Scorbutus	109	3	22	0								
	Scrophula	1	1	3	0								
Diseases of the Eye	Morbi Oculorum	38	0	52	0	38	0	52	0	90	0	4 ·267	0 ·000
Do. Skin	Cutis	17	0	18	0	17	0	18	0	35	0	1 ·659	0 ·000
	Other diseases	497	10	563	5	497	10	563	5	*1060	+15	50 ·260	1 ·415
	Total	2885	222	3751	204	2885	222	3751	204	6636	426	314 ·651	6 ·419

Per centage of deaths to strength during these years, has been 20·199.

* Of this number 170 were cases of ulcer with 5 deaths.

+ Including four from inflammation external, two from apostema, two from wounds and accidents, and two not particularised.

JAIL OF MANGALORE.

No. 6.—*Table exhibiting the number of Admissions and deaths of the Prisoners under Trial, from each class of disease, for ten years.*

CLASSES.	DISEASES.	From 1829 to 1839 exclusive of 1831. Aggregate strength 762. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers.....	Febrisephemera	3	0	18	0								
	,, intermittents quot.....	12	1	41	6	16	2	59	6	75	8	9 ·842	10 ·666
	,, remittens...	0	0	0	0								
	,, com. cont...	1	1	0	0								
	Cholera.....	27	17	2	2	27	17	2	2	29	19	3 ·805	65 ·517
Diseases of the Abdominal viscera.....	Diarrhœa.....	194	4	365	49								
	Dysenteria acuta et chronica.	81	8	105	13	276	12	487	62	763	74	100 ·131	9 ·698
	Obstipatio.....	1	0	17	0								
Diseases of the Lungs.	Catarrhus.....	0	0	0	0								
	Asthma.....	1	0	2	0	1	0	2	0	3	0	0 ·393	0 ·000
	Phthisis pulmonalis.....	0	0	0	0								
	Mania.....	13	2	5	0	13	2	5	0	18	0	2 ·462	0 ·000
EruptiveFevers.....	Variola.....	11	1	47	7	24	1	49	7	73	8	9 ·580	10 ·958
	Varicella.....	13	0	2	0								
Dropsies....	Anasarca.....	1	0	4	3	3	1	4	3	7	4	0 ·918	57 ·142
	Ascitis.....	2	1	0	0								
Rheumatic affections.	Rheumat. acutus et chronicus.	4	0	5	0	4	0	5	0	9	0	1 ·181	0 ·000
Venereal affections..	Syphilis primitiva.....	2	0	5	0	2	0	5	0	7	0	0 ·918	0 ·000
	,, consecutiva..	0	0	0	0								
Specific diseases.....	Atrophia.....	16	8	45	30	19	10	59	30	78	40	10 ·236	51 ·320
	Scorbutus.....	3	2	14	0								
	Scrophula.....	0	0	1	0								
Diseases of the Eye..	Morbi Oculorum.....	3	0	4	0	3	0	4	0	7	0	0 ·918	0 ·000
Do. ,, Skin.	,, Cutis.....	4	0	40	0	4	0	40	0	44	0	5 ·774	0 ·000
	Other diseases..	29	2	69	6	29	2	69	6	*98	+8	12 ·860	8 ·163
	Total..	421	47	791	116	421	47	791	116	1212	163	159 ·055	13 ·448

Note.—Per centage of deaths to strength, 21·391.

* Of this number 45 were cases of ulcus.

+ Six of which were under the head ulcus, one from vulnus sclopitorum and one from vulnus incisum.

Remarks on the preceding tables of disease.

The annual average numerical strength of the convicts has been 210, and the admissions into hospital 663, or 314·651 per cent on the strength; the total admissions being 6636, the deaths 426 from an aggregate strength of 2109 men.

The principal diseases both as to number and the mortality caused by them, have been fevers, cholera, diarrhœa, dysentery and atrophia, as the following statement will shew; in which are exhibited the admissions and deaths from the diseases each year, and also the total sick treated and mortality.

	1829.		1830.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		1839.		Total.	
	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Fevers	71	2	67	0	169	3	99	2	121	1	204	2	111	1	63	0	115	11	185	1	1205	23
Cholera	1	1	1	1	73	40	0	0	0	0	0	0	0	0	0	0	84	46	0	0	159	88
Diarrhœa	121	6	145	4	377	24	348	29	270	19	464	8	366	16	233	20	331	27	391	13	3046	166
Dysentery	41	2	50	6	51	6	4	0	5	1	101	3	58	6	27	4	4	2	0	0	341	30
Atrophy	0	0	1	1	13	9	2	2	4	2	29	14	23	8	33	11	46	33	12	7	163	87
Admissions and deaths from these diseases	234	11	264	12	683	82	453	33	400	23	798	27	558	31	356	35	580	119	588	21	4914	394
Total admissions and deaths	584	15	506	15	957	89	624	36	520	28	880	27	668	31	474	38	687	124	736	23	6636	426
Strength each year	176		181		246		218		223		231		209		174		221		228		2109	
Per centage of deaths to strength	8	·522	8	·287	36	·178	16	·513	12	·556	11	·645	14	·832	21	·839	56	·108	10	·087	20	·199
Per centage of sick to strength	331	·801	279	·558	389	·024	286	·238	263	·183	380	·952	319	·617	272	·413	310	·859	322	·807	314	·651

Thus it will be observed that 3-4ths of the whole admissions have been occasioned by these complaints, and nearly one half by diarrhœa alone; which 394 deaths out of 426, or nearly 12-13ths of the whole mortality, have been produced by these diseases.

Amongst the prisoners waiting for trial, see table No. 6, the same diseases have produced exactly 3-4th of the admissions or 910 out of 1212, and 6-7th of the whole mortality or 139 out of 163, from an aggregate strength of 762 men. The preceding table exhibits the annual results during the ten years amongst the convicts ; but it is considered necessary to give here separately the admissions and deaths amongst the prisoners waiting for trial only for 1837. The strength during that year amounted to 371, the admissions into hospital 625, and deaths 97,

	Ad.	Dd.
of which were Fevers.....	37	5
Cholera.....	0	0
Diarrhœa.....315		35
Dysentery.....	94	12
Atrophy	39	28
Total.....485		80

Thus leaving to be accounted for in the remaining nine years, 587 admissions, with 66 deaths, from an aggregate strength of 391. In the following year 1838, seventeen deaths occurred under the head *cholera,* from twenty seven admissions, and eight from fifteen admissions under the head *atrophy.*

The cause of this excessive sickness and mortality in the jail, in the years 1837 and 1838, is explained in the following extract from the report of Superintending surgeon Sladen, dated 31st December 1837. " Immediately after the insurrection in Canara, (beginning of 1837,) numerous prisoners from all parts of the district were sent to the jail, to await their trial before the commission ; many of these being of the higher classes of natives, who had been accustomed to indulge in the luxuries of wealth and power, were consequently less able to bear up against so sudden a change of diet, and of all their habits, in their passive confinement ; their minds gave way, and although every attention consistent with their safety and situation, was shewn to them, yet many were in

such a state of despondency, that they sunk upon the first appearance of disease."

The same causes may be supposed to have operated more powerfully in the following year 1838, amongst those of the insurgents still remaining in jail; and the very great mortality amongst the convicts in that year, recorded in the foregoing table, can only thus be explained.

The ratio of sickness and mortality in this jail however, has always been high, even excluding the deaths produced by the casual visitation of cholera, in an epidemic form, as in 1832; and it has been ascribed to various causes, from time to time, such as the want of free circulation of air, from the excessive vegetation in the immediate neighbourhood of Mangalore; depressing passions of the mind, leading to disease of the digestive organs, and a state of general debility; and to the objectionable mode of preparing the prisoners food previous to the year 1839, when it was cooked in large messes, and was occasionally said to be imperfectly boiled; this system has been altered, and the prisoners are now allowed to prepare their food in small messes, according to their various castes. Some of these circumstances are applicable to other jails, where similar results have not occurred, and as the mortality continues high, and from the same diseases as above mentioned, it must be ascribed to other causes. It is known that the generality of the prisoners are inhabitants of the neighbouring hilly districts, and who, on being removed from their comparatively cool and bracing region, to the low and damp climate of the coast, (independent of the sudden change with regard to their diet and habits, and the depressing pasisons of the mind, peculiarly intense in such instances,) must suffer more from incarceration, than prisoners in other parts of the country.

The troops at Mangalore enjoy excellent health, and table No. 22, exhibits a striking contrast in regard to the health of the native troops of the garrison, and that of the prisoners in the jail.

REMARKS ON THE GENERAL TABLES.

Remarks on the General tables of Diseases.

The general table No. 7, for European troops, includes only the sick of H. M.'s Regiments at Cannanore; and, as in the corresponding tables for the preceding divisions, it exhibits the admissions into hospital and mortality, from the most important diseases, each half year, for the period of ten years, from 1829 to 1838 inclusive; the per centage of sick to strength, of deaths to sick treated, and of deaths to strength are also given; the average of these, as shewn in the abstract return No. 8, has been 153·122,—2·461,—and 3·769 respectively; the total admissions having amounted to 12,187, and the deaths to 300, from an aggregate strength of 7,959 men.

The per centage of admissions has been very high during 1835, 36, 37 and 1838, and it will be observed that this increase has been almost wholly occasioned by venereal complaints. The ratio of mortality, was also much above the average in 1834, 37 and 1838, exclusively the result of dysentery in the two first years, and in part attributable to cholera in 1838.

Fevers, dysentery, hepatitis, venereal complaints, thoracic diseases and rheumatism have been the most prevalent diseases; and the most fatal have been *dysentery, hepatitis and thoracic diseases;* the small amount of mortality from cholera, during the ten years, will not fail to be observed. The greatest mortality has occured in the second half yearly period, but the admissions in each of the half yearly periods is nearly similar.

The high ratio of mortality amongst the European troops stationed at Cannanore, during 1837 and 1838, still continues, and is chiefly the result of dysentery, as the following table will shew.

MALABAR AND CANARA.

Table No. 7.—Return of Sick of the European Troops, exhibiting the half yearly admissions and deaths from the principal diseases, and those which have been either Epidemic or Endemic.

Years.			Diseases.																													Average strength each year.	Annual per centage of sick to strength.	Annual per centage of deaths to sick treated.	Annual per centage of deaths to strength.
			Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	„ continued.	„ intermittent.	„ remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small Pox.	Syphilis, &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & Injuries.	Other Complaints.				
1829	Admitted.	1st half.	788	0	0	0	1	0	0	4	126	0	0	68	12	2	0	71	0	0	26	38	0	3	71	0	98	268	998	153·707	2·803	4·308
		2d „	746	0	0	0	0	0	0	9	105	0	0	86	4	1	0	56	3	0	12	14	0	3	72	0	89	292				
	Died.....	1st half.	17	0	0	0	1	0	0	0	6	0	0	2	0	1	0	3	0	0	0	0	0	0	1	0	1	2				
		2d „	26	0	0	1	0	0	0	0	11	0	0	1	0	0	0	2	1	0	0	0	0	0	6	0	1	3				
1830	Admitted.	1st half.	523	0	0	0	0	0	0	2	41	0	0	38	3	0	0	40	2	0	20	8	0	6	28	0	79	256	960	103·958	1·302	1·354
		2d „	475	0	0	0	0	0	0	0	59	0	0	51	4	0	0	15	1	0	13	18	0	4	27	0	66	217				
	Died.....	1st half.	9	0	0	0	0	0	0	0	2	0	0	1	0	0	0	2	0	0	0	0	0	0	3	0	0	1				
		2d „	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1				
1831	Admitted.	1st half.	373	0	0	0	2	0	0	3	29	0	0	29	3	0	0	34	0	0	9	6	0	2	17	0	65	174	899	93·933	3·905	3·730
		2d „	472	0	0	0	6	0	0	3	92	0	0	49	1	5	0	27	0	0	28	17	0	2	14	0	48	180				
	Died.....	1st half.	8	0	0	0	0	0	0	0	3	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0				
		2d „	25	0	0	0	1	0	0	0	15	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	5				
1832	Admitted.	1st half.	451	0	0	0	18	0	0	2	61	0	0	34	8	14	0	17	2	0	67	27	0	8	10	0	61	122	778	110·668	2·903	3·213
		2d „	410	0	0	0	7	0	0	5	67	0	0	59	1	4	0	16	1	0	20	22	0	9	3	0	56	140				
	Died.....	1st half.	12	0	0	0	0	0	0	0	3	0	0	1	0	0	0	1	0	0	0	1	0	0	4	0	0	2				
		2d „	13	0	0	0	2	0	0	0	3	0	0	0	0	0	0	5	0	0	0	1	0	1	1	0	0	0				
1833	Admitted.	1st half.	408	1	0	0	4	0	0	11	54	0	0	37	1	1	0	15	3	0	20	17	0	6	7	0	73	158	749	114·285	2·336	2·670
		2d „	448	0	1	0	2	0	0	14	71	0	0	34	0	0	0	20	2	0	18	15	0	35	2	0	51	183				
	Died.....	1st half.	11	1	0	0	1	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5				
		2d „	9	0	1	0	0	0	0	0	2	0	0	0	0	0	0	4	0	0	0	0	0	1	1	0	0	0				
1834	Admitted.	1st half.	626	1	2	0	9	6	20	42	101	0	4	88	13	26	0	22	3	0	31	21	0	34	27	0	57	119	823	169·623	3·510	5·953
		2d „	770	2	0	0	2	22	44	13	157	0	2	90	24	5	0	32	2	0	41	31	0	35	18	0	60	190				
	Died.....	1st half.	15	0	1	0	0	0	0	1	1	0	0	1	0	1	0	2	2	0	0	0	0		1	0	1	4				
		2d „	34	2	0	0	0	0	1	2	16	0	0	1	1	1	0	4	0	0	0	1	0		2	0	0	3				
1835	Admitted.	1st half.	689	1	0	0	1	16	7	16	91	0	1	73	23	1	0	28	1	0	19	22	1	107	48	0	48	185	700	201·857	1·203	2·428
		2d „	724	0	0	0	0	12	11	30	72	0	0	67	8	0	0	30	0	0	24	44	0	108	60	0	37	221				
	Died.....	1st half.	8	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2				
		2d „	9	0	0	0	0	0	1	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3				
1836	Admitted.	1st half.	666	0	0	0	0	14	2	14	74	0	1	52	4	1	0	59	1	0	13	51	0	69	46	0	46	219	720	207·222	1·742	3·611
		2d „	826	0	1	0	0	21	2	5	136	0	0	72	2	0	0	57	2	0	18	69	0	115	55	0	51	220				
	Died.....	1st half.	11	0	0	0	0	0	0	0	5	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	0	2				
		2d „	15	0	1	0	0	0	0	0	6	0	0	0	0	0	0	1	0	0	0	2	0	0	1	0	1	3				
1837	Admitted.	1st half.	801	0	0	0	2	18	1	19	120	0	0	62	11	2	0	50	1	0	16	63	0	133	40	0	41	225	675	223·703	2·715	6·074
		2d „	706	0	0	0	1	26	1	11	101	0	2	46	5	2	0	21	2	0	11	68	0	139	40	0	36	194				
	Died.....	1st half.	25	0	0	0	0	0	0	0	15	0	0	3	0	0	0	5	0	0	0	0	0	0	1	0	0	1				
		2d „	16	0	0	0	0	0	0	0	11	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	2				
1838	Admitted.	1st half.	626	0	0	0	0	26	1	6	106	0	0	67	1	3	0	27	2	0	16	61	0	82	36	0	51	141	657	195·129	2·274	5·022
		2d „	656	0	0	0	21	24	1	11	112	0	1	71	1	2	0	38	2	0	29	52	0	110	36	0	30	115				
	Died.....	1st half.	10	0	0	0	0	0	0	0	7	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0				
		2d „	23	0	0	0	8	0	0	0	11	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0				

Table No. 8.—*Europeans.—Abstract of the preceding Return shewing the Total number of Admissions and Deaths, &c. from* 1829 *to* 1838.

	Admissions and deaths.	Diseases.																									
		Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	„ continued	„ intermittent.	„ remittent.	Guinea Worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other Complaints.
Aggregate Strength. 7,959.																											
Admitted..... 1st half.	5,954	3	2	0	37	80	31	119	803	0	6	548	79	50	0	363	15	0	237	314	1	450	330	0	619	1867
2d half.	6,233	2	2	0	39	105	59	101	972	0	5	625	50	19	0	312	15	0	214	350	0	560	327	0	524	1952
Total...	12,187	5	4	0	76	185	90	220	1,775	0	11	1,173	129	69	0	675	30	0	451	664	1	1010	657	0	1143	3819
Died..... 1st half.	126	2	1	0	2	0	0	4	44	0	0	9	0	2	0	23	2	0	0	2	0	0	14	0	2	19
2d half.	174	2	2	1	11	0	2	2	81	0	0	7	1	1	0	19	1	0	0	4	0	2	16	0	2	20
Total...	300	4	3	1	13	0	2	6	125	0	0	16	1	3	0	42	3	0	0	6	0	2	30	0	4	39
Per centage of sick to strength.	153 ·122	0 ·062	0 ·050	0	0 ·954	2 ·324	1 ·130	2 ·764	22 ·301	0	0 ·138	14 ·738	1 ·620	0 ·866	0	8 ·480	0 ·376	0	5 ·665	8 ·342	0 ·012	12 ·690	8 ·254	0	14 ·361	47 ·983
Per centage of deaths to sick treated.	2 ·461	80 ·000	75 ·000	0	17 ·105	0	2 ·222	2 ·727	7 ·042	0	0	1 ·364	0 ·775	4 ·347	0	6 ·222	10 ·000	0	0	0 ·903	0	0 ·168	4 ·566	0	0 ·349	1 ·021
Per centage of deaths to strength,	3 ·769	0 ·050	0 ·037	0 ·012	0 ·163	0	0 ·250	0 ·075	1 ·570	0	0	0 ·201	0 ·012	0 ·037	0	0 ·527	0 ·037	0	0	0 ·075	0	0 ·025	0 ·376	0	0 ·050	0 ·490

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Table No. 9.—Return of sick of the Native Troops exhibiting the half yearly admissions and deaths from the principal diseases, and those which have been either Epidemic or Endemic.

Years.			Diseases.																													Average strength each year.	Annual per centage of sick to strength.	Annual per centage of deaths to sick treated.	Annual per centage of deaths to strength.
			Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small Pox.	Syphilis, &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & Injuries.	Other Complaints.				
1829	Admitted.	1st half.	1151	0	0	0	4	42	0	23	12	0	0	4	66	2	0	0	0	0	15	129	3	56	9	0	82	704	5930	43·035	1·841	0·792
		2d ,,	1401	2	10	0	0	0	0	35	14	0	0	4	60	5	0	0	4	0	29	127	0	37	17	0	77	980				
	Died.	1st half.	18	0	0	0	2	1	0	1	1	0	0	0	0	1	0	0	0	0	0	3	2	0	2	0	0	5				
		2d ,,	29	2	4	0	0	0	0	0	3	0	0	0	1	2	0	0	0	0	0	3	0	1	3	0	0	10				
1830	Admitted.	1st half.	1437	2	2	0	92	0	0	27	8	0	0	2	119	17	0	1	2	0	14	93	2	31	19	0	85	921	5601	53·901	2·484	1·339
		2d ,,	1582	0	0	0	2	0	0	27	18	0	6	5	111	9	0	0	5	0	15	104	0	40	15	0	92	1133				
	Died.	1st half.	56	2	2	0	36	0	0	0	1	0	0	0	2	0	0	0	0	0	0	2	1	0	5	0	1	4				
		2d ,,	19	0	1	0	0	0	0	1	3	0	0	0	5	0	0	0	0	0	0	1	0	1	1	0	0	6				
1831	Admitted.	1st half.	1108	0	2	0	4	0	0	24	19	0	5	8	56	3	0	6	0	0	31	98	0	52	18	0	108	674	5008	47·264	1·563	0·738
		2d ,,	1259	0	0	0	8	0	0	11	36	0	36	9	72	7	0	7	1	0	13	96	0	34	19	0	105	811				
	Died.	1st half.	16	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	9				
		2d ,,	21	0	0	0	2	0	0	2	1	0	1	1	1	1	0	1	0	0	0	1	0	0	3	0	0	7				
1832	Admitted.	1st half.	904	0	0	0	35	0	0	18	13	0	13	8	53	2	0	3	0	0	15	79	0	24	13	0	105	523	4569	43·904	2·691	1·181
		2d ,,	1102	1	1	0	6	0	0	16	26	0	21	68	54	6	0	6	2	1	16	90	0	21	22	0	79	666				
	Died.	1st half.	26	0	0	0	8	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	6	0	2	7				
		2d ,,	28	1	1	0	1	0	0	1	3	0	0	3	2	0	0	0	0	1	0	4	0	0	2	0	0	9				
1833	Admitted.	1st half.	696	1	0	0	1	0	0	13	6	0	69	16	49	1	0	0	3	0	9	50	0	26	6	0	66	380	2853	50·543	2·357	1·191
		2d ,,	746	0	0	0	1	0	0	7	16	0	7	9	66	1	0	1	2	0	4	61	0	39	8	0	43	481				
	Died.	1st half.	13	0	0	0	0	0	0	2	1	0	2	1	2	0	0	0	0	0	0	1	0	0	1	0	0	3				
		2d ,,	21	0	0	0	1	0	0	0	3	0	1	0	2	1	0	0	1	0	0	0	0	0	5	0	1	6				
1831	Admitted.	1st half.	1112	0	1	0	1	74	0	69	18	0	96	14	191	8	1	1	3	0	8	111	1	56	27	1	126	305	3098	67·010	2·456	1·646
		2d ,,	964	0	4	1	1	231	0	11	21	0	30	15	140	3	0	0	3	0	16	81	12	56	21	0	55	263				
	Died.	1st half.	28	0	0	0	0	0	0	4	2	0	0	1	7	1	0	0	0	0	0	2	0	0	4	0	4	3				
		2d ,,	23	0	1	1	1	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	1	3	0	2	9				
1835	Admitted.	1st half.	874	0	1	0	0	114	0	13	15	0	104	10	181	1	0	1	5	0	4	79	3	40	27	0	50	226	2703	64·964	2·448	1·590
		2d ,,	882	1	2	0	0	184	1	26	19	0	84	3	89	1	5	0	1	0	10	88	1	32	15	0	69	251				
	Died.	1st half.	21	0	1	0	0	0	0	3	2	0	1	0	1	0	0	0	0	0	0	6	0	0	4	0	0	3				
		2d ,,	22	0	1	0	0	0	0	4	4	0	2	0	1	0	0	0	0	0	0	2	0	1	3	0	0	4				
1836	Admitted.	1st half.	750	1	6	0	1	82	0	19	9	0	57	4	157	1	1	1	5	0	7	93	0	22	9	0	65	210	2502	58·553	1·979	1·159
		2d ,,	715	0	3	0	1	145	1	19	19	0	40	10	54	3	1	0	2	0	8	73	3	35	23	0	42	233				
	Died.	1st half.	18	0	0	0	1	0	0	2	1	0	2	0	2	0	0	1	0	0	0	0	0	0	3	0	0	6				
		2d ,,	11	0	0	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	3				
1837	Admitted.	1st half.	1258	0	10	0	0	102	0	73	22	0	85	46	256	9	1	3	1	0	8	94	1	55	19	0	126	347	3535	58·562	1·189	1·018
		2d ,,	1769	0	9	0	0	319	2	93	38	0	77	14	199	9	0	5	2	0	20	209	0	67	37	0	94	575				
	Died.	1st half.	11	0	2	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	3				
		2d ,,	25	0	1	0	0	0	0	5	4	0	0	1	3	0	0	1	0	0	0	1	0	1	5	0	0	3				
1838	Admitted.	1st half.	1626	0	4	0	107	220	0	77	32	0	129	13	194	7	3	1	1	0	18	172	11	59	42	0	97	439	3944	75·000	3·414	2·560
		2d ,,	1332	0	5	0	3	223	0	53	21	0	79	4	107	13	0	1	4	0	14	132	5	57	20	0	93	498				
	Died.	1st half.	73	0	2	0	43	0	0	6	2	0	0	0	2	2	0	0	0	0	0	2	1	1	1	0	0	11				
		2d ,,	28	0	2	0	2	0	0	5	3	0	0	1	2	1	0	0	0	0	0	0	0	0	3	0	2	7				

Table No. 10.—*Natives.—Abstract of the preceeding Return, shewing the Total number of Admissions and Deaths, &c. from* 1829 *to* 1838.

	Admissions and Deaths.	Diseases.																									
		Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever Ephemeral.	„ continued.	„ intermittent.	„ remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other complaints.
Aggregate Strength. 39,743.																											
Admitted.....	1st half.	10,916	4	26	0	245	634	0	356	154	0	558	125	1322	51	6	17	20	0	129	998	21	421	189	1	910	4729
	2d half.	11,752	4	34	1	22	1102	4	298	228	0	374	141	952	57	6	20	26	1	145	1061	21	418	197	0	749	5891
	Total...	22;668	8	60	1	267	1736	4	654	382	0	932	266	2274	108	12	37	46	1	274	2059	42	839	386	1	1659	10620
Died.....	1st half.	280	2	9	0	90	1	0	21	12	0	6	3	18	4	0	1	0	0	0	18	4	1	28	0	8	54
	2d half.	227	3	11	1	8	0	0	21	26	0	4	6	22	5	0	2	1	1	0	12	0	5	30	0	5	64
	Total...	507	5	20	1	98	1	0	42	38	0	10	9	40	9	0	3	1	1	0	30	4	6	58	0	13	118
Annual per centage of sick to strength.		57 ·036	0 ·020	0 ·150	0 ·002	0 ·671	4 ·368	0 ·010	1 ·645	0 ·961	0	2 ·345	0 ·669	5 ·721	0 ·271	0 ·030	0 ·093	0 ·115	0 ·002	0 ·689	5 ·180	0 ·105	2 ·111	0 ·971	0 ·002	4 ·174	26 ·721
Annual per centage of deaths to sick treated.		2 ·236	62 ·500	33 ·333	100 ·000	36 ·704	0 ·057	0	6 ·422	9 ·947	0	1 ·072	3 ·383	1 ·759	8 ·333	0	8 ·108	2 ·173	100 ·000	0	1 ·457	9 ·523	0 ·715	15 ·025	0	0 ·783	1 ·111
Annual per centage of deaths to strength.		1 ·275	0 ·012	0 ·050	0 ·002	0 ·246	0 ·002	0	0 ·105	0 ·095	0	0 ·025	0 ·022	0 ·100	0 ·022	0	0 ·007	0 ·002	0 ·002	0	0 ·075	0 ·010	0 ·015	0 ·145	0	0 ·032	0 ·296

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No. 11.—*Table exhibiting the number of Admissions, and Deaths from each class of Disease, for 5 years.*

EUROPEAN TROOPS.

CLASSES.	DISEASES.	From 1834 to 1838. Aggregate strength 3,575. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions and Deaths from each class of Disease. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers	Febris ephemera	6	0	5	0								
	,, intermittent quot.	52	0	38	1								
	,, tertiana	0	0	2	0	433	5	400	5	833	10	23 ·300	1 ·200
	,, remittens	33	1	9	1								
	,, continua	342	4	346	3								
	Cholera	12	0	24	8	12	0	24	8	36	8	1 ·006	22 ·222
Diseases of the abdominal viscera	Dysenteria acuta	486	30	574	46								
	,, chronica	6	0	4	2	492	30	578	48	1070	78	39 ·930	7 ·289
	Diarrhœa	97	2	70	2								
	Colica	94	0	93	0								
	Obstipatio	72	0	77	0								
	Hœmorrhois	107	0	129	0								
	Enteritis	3	0	1	0	400	3	411	7	811	10	22 ·685	1 ·233
	Peritonitis	1	0	5	4								
	Gastritis	0	0	2	1								
	Dyspepsia	26	1	34	0								
	Hepatitis acuta	161	7	140	4								
	,, chronica	25	4	38	4	186	11	178	8	364	19	10 ·181	5 ·219
Diseases of the Lungs and Heart.	Catarrhus	165	1	163	0								
	Asthma	2	0	5	0								
	Phthisis pulmonalis	1	3	8	2								
	Hœmoptysis	5	0	1	0								
	Pleuritis	0	0	0	0	197	6	209	6	406	12	11 ·356	2 ·955
	Pneumonia	18	1	27	1								
	Carditis	4	1	3	2								
	Palpitatio	2	0	1	0								
	Dyspnœa	0	0	1	1								
Diseases of the Brain.	Apoplexia	2	1	2	2								
	Epilepsia	13	0	19	0								
	Paralysis	5	0	1	0								
	Cephalalgia	31	0	17	0								
	Phrenitis	0	0	0	0								
	Ictus solis	0	0	0	0								
	Amentia	3	1	4	0	90	3	106	4	196	7	5 ·482	3 ·571
	Mania	5	1	4	0								
	Hydrophobia	0	0	0	0								
	Delirium Tremens	3	0	7	2								
	Ebrietas	28	0	52	0								
Diseases of the Eye	Morbi oculorum	95	0	123	0	95	0	123	0	218	0	6 ·097	0 ·000
do ,, Skin	,, cutis	80	0	105	0	80	0	105	0	185	0	5 ·174	0 ·000
Eruptive Fevers	Variola	0	0	0	0								
	Varicella	1	0	0	0								
	Rubeola	0	0	0	0	3	0	2	0	5	0	0 ·139	0 ·000
	Scarlatina	0	0	0	0								
	Erysipelas	2	0	2	0								
Dropsies	Anasarca	8	1	9	4								
	Ascites	5	2	1	1	13	3	10	5	23	8	0 ·643	34 ·782
	Hydrothorax	0	0	0	0								
Rheumatic affections.	Rheumatismus acutus	203	1	243	0								
	,, chronicus	15	0	21	3	222	1	270	3	492	4	13 ·762	0 ·813
	Neuralgia	0	0	0	0								
	Odontalgia	4	0	6	0								
Venereal affections	Syphilis primitiva	183	0	235	0								
	,, consecutiva	7	0	9	0								
	Gonorrhœa	199	0	231	0	425	0	507	0	932	0	26 ·069	0 ·000
	Hernia humoralis	32	0	30	0								
	Strictura urethrae	4	0	2	0								
Specific diseases	Atrophia	2	1	1	1								
	Beriberi	0	0	0	0								
	Elephantiasis	0	0	0	0								
	Lepra	0	0	0	0								
	Dracunculus	0	0	0	0								
	Ulcus phagedenicum	0	0	0	0	11	1	7	1	18	2	0 ·503	11 ·111
	Scrophula	1	0	3	0								
	Scorbutus	8	0	3	0								
Punishment.	Punitus	10	0	22	0	10	0	22	0	32	0	0 ·895	0 ·000
Wounds and injuries	Fractura	4	0	9	0								
	Luxatio	1	0	4	0								
	Subluxatio	37	0	35	0								
	Vulnus sclopitorum	5	0	1	1	243	1	214	1	457	2	12 ·783	0 ·437
	,, incisum	32	0	34	0								
	Contusio	159	1	127	0								
	Ambustio	5	0	4	0								
Other diseases, including Phlogosis, Ulcus, &c.		499	5	516	1	499	5	516	1	*1015	+6	28 ·391	0 ·591
Total		3411	69	3682	97	3411	69	3682	97	7093	166	198 ·405	2 ·340

Average per centage of deaths to strength during these five years, has been 4·647.

* Of this number were
Phlogosis..... ..281 0
Do. do. Ulcus.....390 1
Do. do. Bubo simplex.152 0
823 1

+ The deaths under this head include besides the one accounted for in the preceding note, 2 from aneurisma, 1 from apostema lumborum, 1 from nephritis and one not particularised.

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No. 12.—*Table exhibiting the number of Admissions, and Deaths from each class of Disease, for 5 years.*

NATIVE TROOPS.

CLASSES.	DISEASES.	From 1834 to 1838. Aggregate strength 15,782. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Admissions & deaths from each class of disease. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
Fevers	Febris ephemera	471	4	310	2								
	,, intermittent quot.	920	13	546	11	1563	22	974	16	2537	38	16 ·075	1 ·427
	,, tertiana	59	0	43	0								
	,, remittens	26	3	29	1								
	,, continua	87	2	46	2								
	Cholera	109	44	5	4	109	44	5	4	114	48	0 ·722	42 ·105
Diseases of the Abdominal viscera	Dysenteria acuta	93	8	107	11	96	8	118	13	214	21	1 ·355	9 ·813
	,, chronica	3	0	11	2								
	Diarrhœa	251	15	202	17								
	Colica	72	0	67	2								
	Obstipatio	25	2	37	1								
	Hœmorrhois	12	0	19	0	476	25	459	22	935	47	5 ·924	5 ·026
	Enteritis	1	0	2	1								
	Peritonitis	0	0	0	0								
	Gastritis	0	0	1	0								
	Dyspepsia	115	8	131	1								
	Hepatitis acuta	4	0	4	0	7	1	6	1	13	2	0 ·082	15 ·384
	,, chronica	3	1	2	1								
Diseases of the Lungs and Heart.	Catarrhus	69	7	69	7								
	Asthma	28	0	25	1								
	Phthisis pulmonalis	8	4	7	4								
	Hœmoptysis	4	0	1	0	124	13	116	16	240	29	1 ·520	12 ·083
	Pleuritis	0	0	0	0								
	Pneumonia	9	2	9	4								
	Carditis	0	0	0	0								
	Palpitatio	0	0	0	0								
	Dyspnœa	6	0	5	0								
Diseases of the Brain.	Apoplexia	1	0	1	0								
	Epilepsia	3	0	5	3								
	Paralysis	5	1	8	1								
	Cephalalgia	19	0	26	0								
	Phrenitis	0	0	0	0								
	Ictus solis	0	0	0	0	46	2	65	5	111	7	0 ·703	6 ·306
	Amentia	10	0	6	0								
	Mania	5	0	6	0								
	Hydrophobia	0	0	0	0								
	Delirium Tremens	3	1	13	1								
	Ebrietas	0	0	0	0								
Diseases of the Eye	Morbi Oculorum	45	0	68	0	45	0	68	0	113	0	0 ·716	0 ·000
Do. Skin	Cutis	592	0	1102	0	592	0	1102	0	1694	0	10 ·733	0 ·000
Eruptive Fevers	Variola	8	1	5	0								
	Varicella	8	0	16	0								
	Rubeola	25	0	25	0	43	1	49	0	92	1	0 ·582	1 ·086
	Scarlatina	0	0	0	0								
	Erysipelas	2	0	3	0								
Dropsies	Anasarca	16	5	21	4								
	Ascites	2	1	3	2	19	7	24	6	43	13	0 ·272	30 ·232
	Hydrothorax	1	1	0	0								
Rheumatic affections.	Rheumatismus acutus	329	8	345	3								
	,, chronicus	220	2	238	0	558	10	594	3	1152	13	7 ·299	1 ·128
	Neuralgia	0	0	0	0								
	Odontalgia	9	0	11	0								
Venereal affections	Syphilis primitiva	114	1	124	1								
	,, consecutiva	25	0	41	0								
	Gonorrhœa	43	0	42	1	232	1	246	3	478	4	3 ·030	0 ·836
	Hernia humoralis	44	0	37	0								
	Strictura urethrae	6	0	2	1								
Specific diseases	Atrophia	22	5	23	5								
	Beriberi	0	0	1	1								
	Elephantiasis	0	0	0	0								
	Lepra	0	0	0	0								
	Dracunculus	6	0	6	0	42	5	40	6	82	11	0 ·519	13 ·414
	Ulcus phagedenicum	1	0	0	0								
	Scrophula	12	0	9	0								
	Scorbutus	1	0	1	0								
Punishment.	Punitus	6	0	6	0	6	0	6	0	12	0	0 ·076	0 ·000
Wounds and Injuries	Fractura	2	0	1	0								
	Luxatio	1	0	0	0								
	Subluxatio	20	0	34	0								
	Vulnus sclopitorum	96	4	8	1	464	5	353	4	817	9	5 ·176	1 ·101
	,, incisum	75	0	71	1								
	Contusio	260	1	230	2								
	Ambustio	10	0	9	0								
Other diseases, including Phlogosis, Ulcus, &c.		1198	7	1437	10	1198	7	1437	10	*2635	†17	16 ·695	0 ·645
Total		5620	151	5662	109	5620	151	5662	109	11282	260	71 ·486	2 ·304

Average per centage of deaths to strength during these five years, has been 1·647.

* Of this number were

Phlogosis	1052	5
Do. do. Ulcers	1216	2
Do. do. Bubo simplex	265	1
	2533	8

† The deaths under this head include besides those in the preceding note, three from tetanus, two from icterus, one from melancholia, one from hernia strangulata one from prolapsus ani and one from diabetes.

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No. 13.—*Table exhibiting the Admissions and Deaths from the most particular diseases, amongst the European and Native Troops in the Malabar and Canara Division of the Army, during the ten years from* 1829 *to* 1838 *inclusive, with the proportion each bears to the total number of Admissions and Deaths.*

	Cholera.		Fevers.		Dysentery.		Hepatitis.		Diarrhœa.		Thoracic diseases.		Rheumatism.		Syphilis.		Total from these diseases.	
	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.
Europeans.																		
Total Admissions.. 12,187.	76	$\frac{1}{160}$	1,382	$\frac{1}{9}$	1,775	$\frac{1}{7}$	675	$\frac{1}{18}$	220	$\frac{1}{55}$	657	$\frac{2}{37}$	664	$\frac{1}{18}$	1,010	$\frac{1}{12}$	6,459	$\frac{8}{13}$
„ Deaths..... 300.	13	$\frac{1}{23}$	20	$\frac{1}{15}$	125	$\frac{5}{12}$	42	$\frac{1}{7}$	6	$\frac{1}{50}$	30	$\frac{1}{10}$	6	$\frac{1}{50}$	2	$\frac{1}{150}$	244	$\frac{4}{5}$
Natives.																		
Total Admissions... 22,668.	267	$\frac{1}{85}$	3,580	$\frac{3}{19}$	382	$\frac{1}{59}$	37	$\frac{1}{612}$	654	$\frac{2}{69}$	386	$\frac{2}{117}$	2,059	$\frac{1}{11}$	839	$\frac{1}{27}$	8,204	$\frac{4}{11}$
„ Deaths..... 507.	98	$\frac{1}{5}$	68	$\frac{1}{7}$	38	$\frac{1}{13}$	3	$\frac{1}{169}$	42	$\frac{1}{12}$	58	$\frac{1}{9}$	30	$\frac{1}{17}$	6	$\frac{1}{84}$	343	$\frac{2}{3}$

No. 14.—*The following table shews the per centage of Admissions from the same diseases to the strength, of Deaths to the sick treated, and of Deaths to the strength: it exhibits also the difference in these respects amongst the European and Native sick.*

	Cholera.		Fevers.		Dysentery.		Hepatitis.		Diarrhœa.		Thoracic diseases.		Rheumatism.		Syphilis.		Total from these diseases.		Grand Total.	
	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.	Ad. & deaths.	Per-centage.
European Troops. STRENGTH, 7,959																				
Per centage of Admissions to strength.....	76	0·954	1382	17·364	1775	22·301	675	8·480	220	2·764	657	8·254	664	8·342	1010	12·690	6459	81·153	12,187	153·122
„ of Deaths to sick treated.	13	17·105	20	1·447	125	7·042	42	6·222	6	2·727	30	4·566	6	0·903	2	0·198	244	3·762	300	2·461
„ of Deaths to strength....	13	0·163	20	0·251	125	1·570	42	0·527	6	0·075	30	0·376	6	0·075	2	0·025	244	3·065	300	3·769
Native Troops. STRENGTH, 39,743																				
Per centage of Admissions to strength.....	267	0·671	3580	9·010	382	0·961	37	0·093	654	1·645	386	0·971	2059	5·180	839	2·111	8204	20·642	22,668	57·036
„ of Deaths to sick treated.	98	36·704	68	1·896	38	9·947	3	8·108	42	6·422	58	15·025	30	1·457	6	0·715	343	4·180	507	2·236
„ of Deaths to strength...	98	0·246	68	0·171	38	0·095	3	0·007	42	0·105	58	0·145	30	0 075	6	0·015	343	0·863	507	1·257

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No. 15.—*Table shewing the amount of admissions and Deaths from the principal classes of disease, for the period of five years, from* 1834 *to* 1838 *inclusive, with the proportions of admissions from each to the total of sick treated, and of deaths to the total mortality.*

	Fevers.		Cholera.		Dysentery.		Abdominal complaints.		Diseases of the Liver.		Diseases of the Lungs.		Diseases of the Brain.		Dropsies.		Rheumatic affections.		Venereal complaints.	
	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.
European Troops.																				
Total Admissions..... 7093	833	2/17	36	1/197	1070	2/13	811	2/17	364	1/19	406	1/17	196	1/36	23	1/308	492	1/14	932	2/15
„ Deaths..... 166	10	2/31	8	1/21	78	1/2	10	2/31	19	1/9	12	1/14	7	1/24	8	1/21	4	1/41	0	0
Native Troops.																				
Total Admissions ...11282	2537	1/5	114	1/99	214	1/52	935	1/12	13	1/868	240	1/47	111	1/100	43	1/262	1152	2/19	478	2/47
„ Deaths..... 260	38	1/7	48	1/5	21	1/12	47	2/11	2	1/130	29	1/9	7	1/37	13	1/20	13	1/20	4	1/65

No. 16.—*Table exhibiting the per centage of Admissions from the same classes of disease to the strength, of Deaths to sick treated, and of Deaths to strength, both amongst European and Native troops.*

	Fevers.		Cholera.		Dysentery.		Abdominal complaints.		Diseases of the Liver.		Diseases of the Lungs.		Diseases of the Brain.		Dropsies.		Rheumatic affections.		Venereal complaints.	
	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.	Ad. & deaths.	Per-cent-age.
European Troops. STRENGTH, 3575.																				
Per centage of sick to strgth.	833	23·300	36	1·006	1070	29·930	811	22·685	364	10·181	406	11·356	196	5·482	23	0·643	492	13·762	932	26·069
„ of deaths to sick treated.	10	1·200	8	22·222	78	7·289	10	1·233	19	5·219	12	2 955	7	3·571	8	34·782	4	0·813	0	0·000
„ of deaths to strength...	10	0·279	8	0·223	78	2·181	10	0·279	19	0·532	12	0·335	7	0·195	8	0·223	4	0·111	0	0·000
Native Troops. STRENGTH, 15782.																				
Per centage of sick to strgth.	2537	16·075	114	0·722	214	1·355	935	5·924	13	0·082	240	1·520	111	0·703	43	0·272	1152	7·299	478	3·030
„ of deaths to sick treated.	38	1·497	48	42·105	21	9·813	47	5·026	2	15·384	29	12·083	7	6·306	13	30·232	13	1·128	4	0·836
„ of deaths to strength..	38	0·240	48	0·304	21	0·133	47	0·297	2	0·012	29	0·183	7	0·044	13	0·082	13	0·082	4	0·025

No. 17.—*Table exhibiting the amount of sickness and mortality amongst the European Troops stationed at Cannanore, during the years* 1839, 40 *and* 1841.

Years.			Admissions and deaths.	Apoplexy.	Cholera.	Fevers.	Dysentery.	Hepatitis.	Diarrhœa.	Thoracic Diseases.	Rheumatism.	Syphilis.	Average strength each year.	Annual per centage of sick to strength.	Annual percentage of deaths to sick treated.	Annual percentage of deaths to strength.
1839	Admitted.	1st Half.	530	2	0	50	94	20	42	47	34	50	593	167 ·790	3 ·115	5 ·227
		2d Half.	465	0	0	51	122	19	39	54	26	18				
	Died.	1st Half.	4	1	0	0	2	0	1	0	0	0				
		2d Half.	27	0	0	4	17	4	1	0	1	0				
1840	Admitted.	1st Half.	672	1	0	70	185	77	26	63	34	54	659	205 ·007	4 ·737	9 ·711
		2d Half.	679	0	0	43	224	71	25	61	24	35				
	Died.	1st Half.	37	1	0	3	28	5	0	0	0	0				
		2d Half.	27	0	0	1	20	5	0	0	0	0				
1841	Admitted.	1st Half.	783	0	0	71	195	53	67	87	21	27	812	241 ·502	2 ·396	5 ·788
		2d Half.	1178	0	0	148	233	77	95	185	21	37				
	Died.	1st Half.	16	0	0	1	8	5	0	1	0	0				
		2d Half.	31	0	0	5	14	5	3	2	0	0				

The medical Officers in charge of H. M.'s Regiments mention, as the principal causes of these grave diseases,-dysentery and hepatitis,-besides the general effects of a tropical climate, insufficient accommodation for the men in barracks, and want of due ventilation ;-the intemperate habits of the soldiery, and exposure when in a state of intoxication. The opinion on this point of the superintending surgeon is given in the following extracts from his general reports, on the health of the troops for 1837, 40 and 1841.

"Dysentery has prevailed to a great extent, and has proved more fatal during the past six months than for many years previously ; it has its origin in my opinion, principally from intemperance, and the exposure consequent thereon ; nor do I see any prospect of preventing the disease amongst the European soldiery, whilst they have every facility for procuring pernicious fermented liquors so common at Cannanore. The mortality from dysentery has been 15, from hepatitis 5, and from fever 3. Dated 1st July 1837.

The same Authority, talking of the causes of the increase of sickness and mortaility in 1840 and 1841, says, " I am " of opinion that intemperance in the use of partially

" fermented and drugged liquors, with subsequent exposure " to cold, wet and malaria, may be set down as the principal " sources of disease, amongst the European soldiery stationed " at Cannanore. From the boundaries of the esplanade, up " to the houses in the camp bazaar, and entirely surrounding " it, up to the sepoy barracks, the ground is laid out in small " gardens, in each of which is placed a *tier* or *moplah* family; " the gardens are crowded to excess with trees; and a lux- " uriant rank vegetation, during the rainy season covers the " surface; this gives the cantonment when viewed from an " eminence the appearance of a dense jungle, from the boun- " daries of the esplanade quite up to the sepoy lines, and is " no doubt a fertile source of malaria.

" The European soldiery frequent the camp bazaar, when- " ever an opportunity offers; and although the dealers in tod- " dy and arrack are restricted from selling them to the troops, " yet the proof is too positive (to admit of any doubt) of " their getting as mueh as they please, from the different " states in which the men are often seen returning from the " bazaar, to that in which they entered it.

" I have good reason to believe, that the toddy and arrack " are brought for them to private houses and gardens; for a " guard patroles the bazaar, to prevent any from being re- " ceived from the shops; and a peon is stationed near every " shop for the same purpose, so that if these people do their " duty, (which is doubtful) the soldiers must receive it from " some clandestine source.

" Cannanore, some 15 or 20 years back, was considered one " of the most healthy stations in India; at that period " I am informed, that the same facility of obtaining arrack " and toddy, did not exist as at present; the bazaar is now " studded with licensed dealers in spirits." There is now " not a a spare nook or corner, but which is thickly planted " with trees close up to the road side, thereby checking the " free circulation of air, and tending to the production of " malaria."

"From the great mortality that has taken place amongst "the European soldiery within these two years, it behoves "all concerned to endeavour to remove whatever may be "considered the source of disease; I am decidedly of opini- "on, that the cantonment generally, should be cleared from "all superfluous trees, and that in future none should be al- "lowed to be planted nearer than within 50 feet of each "other; this might easily be accomplished, as the ground in "most instances is in possession of the servants of officers, "or their relations and connextions, and who have no further "right, than that of its being originally granted by officers, "commanding the cantonment, and which might, to produce "a salutary purpose, be so far resumed, as to remove the "present overgrown jungle, and restrict its growth in future. "The trees planted on the road sides, should also be occasi- "onally trimmed, so as not to be allowed to project too far, "except at a height that would not interfere with a man rid- "ing on horseback."

The Tables No. 9 and 10, shew the amount of the same diseases and mortality, which have occurred amongst the native troops at head quarters, and at the various out-stations in this division, during the same period of ten years.

Fevers, rheumatism, cutaneous diseases, and venereal complaints, constitute the most numerous admissions, and the mortality has chiefly resulted from *cholera, fevers, thoracic diseases, bowel complaints and rheumatism.*

The total admissions into hospital have amounted to 22,668, and the total deaths have heen 507, from an aggregate strength of 39743 men. The average per centage of sick to strength has been 57·036; of deaths to sick treated 2·236; and of deaths to strength 1·275.

These averages have been pretty uniform during the decennial period, except in 1838, when the admissions were somewhat increased by cholera and febrile disease, and the mortality was nearly doubled by cholera. The amount of sickness in each of the half yearly periods is nearly similar,

but the mortality is somewhat greater in the first half year, occasioned by cholera. The great proportion of the admissions from fever, have been of the intermittent type, as might be supposed from the presence of malaria not only at the various stations, but in the jungles on the hills in their vicinity; the mortality however has not been great, being little more than 1½ per cent, on the attacks. It was observed by several medical officers, that diarrhœa was a frequent complication in this form of fever, and the fatal result in many cases, was attributed more to the affection of the bowels, than to the fever itself. The prevalence of rheumatism may be ascribed also, in a great measure, to the effects of climate;—and the large amount of admissions under the head cutaneous diseases, is partly owing to the same cause, but chiefly to the nature of the diet of the sepoy, on this coast.

In the tables No 11 and 12, for five years, the diseases are classified as in the preceding divisions. The total admissions amongst the European troops, (table No. 11,) amount to 7,093, with 166 deaths, from an aggregate strength of 3575 men; the per centage of sick to strength, being 198·405; of deaths to sick treated 2·340; and of deaths to strength 4·647. Amongst the native troops, (table No. 12.) the total admissions, amount to 11,282, with 260 deaths from an aggregate strength of 15,782; thus giving 71·486 admissions for every 100 men, and 2·304 per cent of deaths, to the sick treated, and 1·647 deaths per cent on the strength.

The tabular statements No. 13, 14, 15 and 16, exhibit much useful information relative to the most important diseases, and to the proportion and per centage of admissions and deaths both amongst the European and native troops.

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No. 18.—*Table exhibiting the sickness and mortality amongst the OFFICERS of H. M.'s regiments at Cannanore, during a period of thirteen years, from* 1829 *to* 1841.

Aggregate strength. 413. CLASSES DISEASES.		Admitted.	Died.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers.	Febris int. quotid....	7	0	93	3	22 ·581	3 ·225
	,, remittens.....	13	2				
	,, com. cont.....	73	1				
	Cholera.....	0	0	0	0	0 ·000	0 ·000
Diseases of the abdominal viscera.	Diarrhœa.....	44	0	155	6	37 ·530	3 ·870
	Dysenteria.....	29	3				
	Hœmorrhois.....	14	0				
	Enteritis,.....	1	1				
	Obstipatio.....	5	0				
	Dyspepsia.....	34	0				
	Icterus.....	0	0				
	Hepatitis.....	28	2				
Diseases of the lungs.	Catarrhus.....	51	0	56	1	13 ·559	1 ·785
	Phthisis pulmonali...	2	1				
	Hœmoptysis.....	3	0				
	Asthma.....	0	0				
	Pneumonia.....	0	0				
Diseases of the brain.	Apoplexia.....	3	1	10	1	2 ·421	10 ·000
	Paralysis.....	3	0				
	Mania.....	3	0				
	Delirium Tremens....	0	0				
	Concussio.....	1	0				
	Rheumatismus.....	43	0	43	0	10 ·411	0 ·000
Venereal affections.	Syphilis primitiva.....	4	0	31	0	7 ·506	0 ·000
	Gonorrhœa.....	21	0				
	Hernia humoralis....	5	0				
	Strictura urethræ.....	1	0				
	Scorbutus.....	1	1	1	1	0 ·242	100 ·000
	Morbi oculorum.....	10	0	10	0	2 ·421	0 ·000
	,, cutis.....	10	0	10	0	2 ·421	0 ·000
	Other diseases.....	254	0	254	0	61 ·501	0 ·000
	Total....	663	12	663	12	160 ·532	1 ·809

Note—Per centage of deaths to strength, 2·905.

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No. 19.—*Table exhibiting the sickness and mortality amongst the WOMEN of H M.'s regiments at Cannanore, during the same period.*

Aggregate strength. 977. CLASSES. DISEASES.		Admitted.	Died.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers	Febris int. quotid....	6	0	174	5	17 ·809	2 ·873
	,, remittens.....	4	1				
	,, com cont.....	164	4				
	Cholera	3	3	3	3	0 ·307	100 ·000
Diseases of the Abdominal viscera	Diarrhœa.....	21	0	385	14	39 ·406	3 ·636
	Dysenteria.....	170	8				
	Colica.....	60	0				
	Dyspepsia.....	28	0				
	Hœmorrhois.....	17	0				
	Obstipatio.....	44	0				
	Enteritis.....	1	1				
	Gastritis.....	2	0				
	Hepatitis.....	42	5				
Diseases of the Lungs.	Catarrhus.....	24	1	32	2	3 ·275	6 ·250
	Phthisis pulmonalis..	1	0				
	Pneumonia.....	6	1				
	Asthma.....	1	0				
Diseases of the Brain.	Apoplexia.	1	1	3	1	0 ·307	33 ·333
	Paralysis.....	1	0				
	Tetanus.....	0	0				
	Hysteria.....	1	0				
Eruptive fevers.....	Variola.....	1	1	1	1	0 ·102	100 ·000
	Varicella.....	0	0				
	Rheumatismus,.....	20	0	20	0	2 ·047	0 ·000
	Anasarca.....	1	0	1	0	0 ·102	0 ·000
	Morbi oculorum.....	14	0	14	0	1 ·432	0 ·000
	,, Cutis.....	5	0	5	0	0 ·511	0 ·000
	Other diseases.....	221	3	221	3	22 ·620	1 ·357
	Total....	859	29	859	29	87 ·922	3 ·376

Note—Per centage of deaths to strength, 2·968.

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No. 20.—*Table exhibiting the sickness and mortality amongst the CHILDREN of H. M.'s regiments at Cannanore, during the same period.*

Aggregate strength. 1612. CLASSES.	DISEASES.	Admitted.	Died.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers..	Febris int. quotid....	2	1	150	9	9 ·305	6 ·000
	,, remittens.....	11	1				
	,, com. cont.....	137	7				
	Cholera	0	0	0	0	0 ·000	0 ·000
Diseases of the abdominal viscera.	Diarrhœa	144	17	264	38	16 ·377	14 ·393
	Dysenteria.....	113	19				
	Marasmus.....	3	2				
	Hepatitis.....	4	0				
Diseases of the lungs.	Cynanche.....	3	0	40	2	2 ·481	5 ·000
	Catarrhus.....	35	1				
	Phthisis pulmonalis..	0	0				
	Pneumonia.....	2	1				
Diseases of the brain.	Convulsio.....	7	7	15	15	0 ·930	100 ·000
	Hydrocephalus.....	7	7				
	Epilepsia.....	0	0				
	Paralysis.....	1	1				
Eruptive Fevers.	Varicella.....	6	0	23	4	1 ·426	17 ·391
	Variola.....	9	4				
	Rubeola.....	8	0				
	Vermes.....	15	1	15	1	0 ·930	6 ·666
	Morbi oculorum.....	33	0	33	0	2 ·047	0 ·000
	,, cutis.....	40	0	40	0	2 ·481	0 ·000
	Other diseases.....	341	14	341	14	21 ·153	4 ·105
	Total....	921	83	921	83	57 ·134	9 0.11

Note—Per centage of deaths to strength, 5·148.

No. 21.—*Table exhibiting the number of Admissions and Deaths, amongst the Native Troops stationed at Calicut, from* 1829 *to* 1841 *inclusive.*

CLASSES. DISEASES.	Aggregate strength 2960.				Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
	1st Half.		2d Half.					
	Ad.	Dd.	Ad.	Dd.				
Fevers..... Febris ephemera.....	44	2	72	0	274	4	9 ·256	1 ·459
„ intermit quotid..	73	0	79	0				
„ remittens.....	1	1	5	1				
Cholera.....	0	0	6	4	6	4	0 ·202	6 ·666
Diseases of the Abdominal viscera.. .... Diarrhœa.....	12	0	18	1	110	4	3 ·716	3 ·636
Dysenteria.....	9	0	8	2				
Obstipatio.....	14	1	20	0				
Dyspepsia.....	9	0	15	0				
Hœmorrhois.....	3	0	2	0				
Diseases of the Lungs Catarrhus.....	10	0	11	0	24	2	0 ·810	8 ·333
Asthma.....	0	0	1	0				
Phthisis pulmonalis..	2	2	0	0				
Diseases of the Brain. Apoplexia.....	1	0	2	1	7	2	0 ·236	28 ·571
Epilepsia.....	1	0	0	0				
Paralysis.....	1	1	0	0				
Amentia.....	0	0	1	0				
Mania.....	0	0	1	0				
Eruptive Fevers..... Variola.....	1	0	2	0	5	0	0 ·168	0 ·000
Varicella..	0	0	2	0				
Dropsics.... Anasarca.....	1	0	3	1	5	1	0 ·168	20 ·000
Ascitis.....	1	0	0	0				
Rheumatismus.....	57	2	69	2	126	4	4 ·256	3 ·174
Venereal affections .. Syphilis primitiva....	19	0	37	0	77	0	2 ·601	0 ·000
Gonorrhœa.....	3	0	8	0				
Hernia humoralis....	4	0	6	0				
Specific diseases..... Atrophia.....	2	1	2	1	10	2	0 ·337	20 ·000
Scrophula.....	0	0	6	0				
Morbi oculorum.....	7	0	10	0	17	0	0 ·574	0 ·000
„ Cutis.....	60	0	99	0	159	0	5 ·371	0 ·000
Other diseases.....	287	1	309	0	*596	1	20 ·135	0 ·167
Total....	622	11	794	13	1416	24	47 ·837	1 ·694

Per centage of deaths to strength 0·810.

* Of this number 183 were cases of ulcus, and 180 phlogosis.

No. 22.—*Table exhibiting the Number of Admissions and Deaths, amongst the Native Troops stationed at Mangalore from* 1832 *to* 1841 *inclusive.*

CLASSES. DISEASES.	Aggregate strength 11079. 1st Half. Ad.	1st Half. Dd.	2d Half. Ad.	2d Half. Dd.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
Fevers..... Febris ephemera.....	186	2	274	2				
,, intermit quotid..	238	3	335	9	1210	27	10 ·921	2 ·231
,, remittens.....	11	2	25	1				
,, com. continua..	62	3	79	5				
Cholera..	7	2	8	1	15	3	0 ·135	20 ·000
Diseases of the abdominal viscera..... Diarrhœa..	158	5	215	18				
Dysenteria.....	75	4	120	14				
Obstipatio.....	20	1	35	0				
Dyspepsia.....	69	4	104	2	838	52	7 ·563	6 ·205
Hœmorrhois.....	6	0	13	0				
Hepatitis.	5	0	18	4				
Diseases of the Lungs. Catarrhus.....	23	8	49	3				
Asthma.....	21	1	11	0				
Phthisis pulmonalis..	4	1	8	2	154	21	1 ·390	13 ·636
Pneumonia.....	11	2	14	4				
Dyspnœa.....	5	0	8	0				
Diseases of the Brain. Epilepsia..	3	0	3	0				
Paralysis.....	5	1	13	1				
Amentia.....	2	0	5	0				
Mania.....	4	0	6	1	50	6	0 ·451	12 ·000
Tetanus.....	1	1	0	0				
Delirium Tremens....	1	1	7	1				
Eruptive fevers..... Variola.....	11	1	4	0				
Varicella.....	7	0	9	0				
Rubeola.....	0	0	24	0	59	1	0 ·532	1 ·699
Erysipelas.....	2	0	2	0				
Dropsies. .. Anasarca.....	13	3	18	2	36	8	0 ·324	22 ·222
Ascites.....	3	2	2	1				
Rheumatismus.....	376	2	450	5	826	7	7 ·455	0 ‘847
Venereal affections... Syphilis primitiva....	191	0	158	1				
,, consecutiva.....	23	0	16	0				
Gonorrhœa.....	33	0	28	0	506	2	4 ·567	0 ·395
Hernia humoralis....	26	0	25	0				
Strictura urethræ.....	3	0	3	1				
Specific diseases..... Atrophia.....	26	6	21	7				
Dracunculus.....	8	0	10	0				
Lepra.....	4	0	9	0	115	13	1 ·038	11 ·304
Scorbutus.....	1	0	2	0				
Scrophula.....	18	0	16	0				
Morbi oculorum.....	39	0	48	0	87	0	0 ·785	0 ·000
,, Cutis.....	361	0	710	0	1071	0	9 ·669	0 ·000
Other diseases.....	1258	4	1650	7	*2908	11	26 ·247	0 ·378
Total....	3320	59	4555	92	7875	151	71 ·080	1 ·917

Note.—Per centage of deaths to strength 1·362.

* Of this number were Phlogosis 654.—Ulcus 221.

MALABAR AND CANARA.

Table shewing the number of Persons successfully vaccinated from 1829 *to* 1838 *inclusive.*

DISTRICT OF STATIONS.	Class and sex of Patients.						Total vaccinated.		REMARKS.
	Christians.		Hindoos.		Mahomedans.				
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
Mangalore,.....	2115	1759	18,414	10,866	2,681	1,458	23,210	14,083	
Onore.....	902	721	19,828	16,691	607	500	21,337	17,912	
Cannanore.....	1085	677	6,671	3,728	1,301	548	9,057	4,953	
Tellicherry.....	717	682	18,427	11,088	4,857	3,126	24,001	14,896	
Calicut.....	540	459	18,619	11,756	7,624	3,475	26,783	15,690	
Angadiporam.....	384	173	12,281	5,745	7,769	3,413	20,434	9,331	
Cochin*.....	1667	1384	2,416	2,016	,372	337	4,455	3,737	
Travancore*.....	1091	1085	3,729	3,148	,649	420	5 ,469	4,653	
Grand Total....	8501	6940	1,00,385	65,038	25,860	13,277	1,34,746	85,255	*up to 1832.

Number of Vaccinators in each District.

	1st Class Vaccinators.	2d Class Vaccinators.	
Mangalore.....	1	3	
Onore.....	1	3	
Cannanore.....	1	3	
Tellicherry.....	2	5	
Calicut.....	1	3	
Angadiporam.....	1	2	
Cochin.....	1	3	
Travancore.....	1	3	
Total.	9	25	

The number vaccinated in this Division during these ten years is 2,20,001; the whole expense incurred amounts to Rupees 60900 which gives an average of somewhat more than 27 11 Rupees per hundred, or 6½ pence per head in English money.

Statement shewing the extent of accommodation, Dietary, Allowances for Clothing, Hours of Labour, &c. in the several Jails throughout the Provinces of Malabar and Canara.

JAIL OF	CANNANORE.	TELLICHERRY.	CALICUT.	MANGALORE.
Number of prisoners the prison is capable of containing in separate sleeping cells.	There are no separate cells for each convict to sleep in.	The prison is not constructed with separate cells, but is thus divided—1 ward capable of containing 100 and 12 cells capable of containing 200 prisoners.	For separate sleeping cells, the prison would require to be entirely remodelled, the present one having 12 wards of different sizes, with 13 solitary cells attached and 2 small wards for debtors, and 1 female ward in separate building, so that only 28 prisoners could be so accommodated.	The jail is divided into or composed of 20 yards, equal to the accommodation of 500 men, the largest will accommodate 60, and the smallest about 10.
Number of prisoners the prison is capable of containing where more than one prisoner sleeps in one cell.	There are 4 wards or cells, one of which is capable of holding 100 and each of the other 70 prisoners.	About 300.	The prison has six large wards for 50 prisoners each—4 small wards for 35 each, & 2 small wards for 20 each. Besides 13 solitary cells, 2 debtors, and 1 female ward—Total 600.	There are no solitary cells smaller than 12 feet by 16.
Dietary or other weekly allowance and weekly cost per head.	Dietary—60 Rs. weight of rice & 6 reas of other articles, such as firewood, chilleys, &c. each per diem. Weekly cost per head..... 0 5 3	Five Annas and 7 pice, or $1\frac{1}{3}$ lb. of rice, and six reas daily.	Rice, fish, vegetables, curry stuff and $\frac{1}{4}$ olluck of cocoanut oil. Total weekly cost per head $15\frac{3}{4}$ Calicut pice, about 5 Annas.	Rs. A. P. 0 9 $6\frac{1}{2}$
Allowance of clothing and bedding, and cost per head.	One cloth every 6 months. Average price 0 8 0 One mat..... 0 0 11 One cumbly annually ... 1 0 0 Lamp oil per month..... 0 1 $3\frac{60}{100}$ Rs... 1 10 $2\frac{60}{100}$	One piece of cloth, or moondoo, every six months, and a mat and cumbly every 12 months or as required, 9 Annas and 8 pice per head, for half year.	Two cloths and 1 cumbly annually and mats when required, cost per head $42\frac{3}{4}$ Calicut pice, about 13 Annas and 5 pice, the mats being made in the jail.	Rs. A. P. 0 4 $7\frac{1}{2}$
Discription of employment and hard labour.	Repairing roads in the cantonment.	Repairing public roads, cutting stones, and making baskets.	Cutting and carrying stones, repairing roads and bridges, working as carpenters and smiths, sawing timber, bringing Cardera leaves for mats, creepers for baskets, &c. &c. cooking, and cleaning the jail.	Constructing and repairing roads, cutting stones & repairing public buildings, and weaving cloths, &c.
Hours of labour and of exercise.	From 6 to 12 A. M. and again from 2 to 5 P. M.	Go out at 6 o'clock in the morning and return at 12 o'clock, go again to work at 2 P. M. and return to jail at 5 P. M.	From $6\frac{1}{2}$ A. M. to $4\frac{1}{2}$ P. M. from which half an hour is deducted for breakfast and one hour as the time occupied in going, and returning from work, leaving $8\frac{1}{2}$ hours for labour.	The prisoners leave the jail at 7 o'clock, and work till 12, when they rest for $\frac{1}{2}$ an hour—they leave work at $\frac{1}{2}$ past 4, when they return to the jail.

APPENDIX.

Meteorological Observations, made at Cannanore in 1841 *and* 1842.

	Barometer.			Thermometer.				Amount of rain.	Number of days on which rain has fallen.	Prevailing Winds.
	Mean Maxim.	Mean Minim.	General Mean.	Mean Maxim.	Mean Minim.	General Mean.	Mean daily range.	Inches.	Days.	
January 1841	*0	0	0	85 ·2	77 ·2	83 ·5	8	0	1	Easterly and Variable.
February ,,	*0	0	0	86 ·4	78 ·4	82 ·7	8	0	0	N. E. and Westerly.
March ,,	29 ·915	29 ·878	29 ·896	87 ·9	81 ·4	84 ·7	6 ·5	0	0	N. E. and N. W.
April ,,	29 ·900	29 ·872	29 ·886	89 ·5	84 ·1	86 ·8	5 ·4	2 ·22	4	N. E. and Westerly.
May ,,	29 ·877	29 ·850	29 ·863	87 ·2	82 ·4	84 ·9	4 ·8	7 ·20	14	N. E. and N. W. W.
June ,,	29 ·848	29 ·836	29 ·842	80 ·1	77 ·5	78 ·7	2 ·6	49 ·75	29	Variable S. W.
July ,,	29 ·843	29 ·798	29 ·820	80 ·5	80 ·1	80 ·3	·4	26 ·97	28	S. W.
August ,,	29 ·892	29 ·834	29 ·863	79 ·2	76 ·9	78	2 ·3	15 ·85	24	S. W.
September,,	29 ·873	29 ·794	29 ·833	81 ·8	81	81 ·4	·8	2 ·90	11	Variable.
October ,,	29 ·906	29 ·820	29 ·863	83 ·5	75 ·5	78 ·5	8	8 ·95	14	do.
November ,,	29 ·922	29 ·827	29 ·874	85 ·7	73 ·5	79 ·6	12 ·2	5 ·60	5	W: to N. N. W,
December ,,	29 ·904	29 ·836	29 ·870	86 ·3	73 ·5	79 ·9	12 ·8	0	0	Variable.
January 1842	29 ·968	29 ·887	29 ·927	86 ·6	73 ·8	80 ·2	12 ·8	·45	2	E. N. E. and S. S. W.
February ,,	29 ·954	29 ·871	29 ·912	87 ·6	76 ·5	82 ·5	11 ·1	·85	1	E. N. E. and W. N. W.
March ,,	29 ·924	29 ·854	29 ·889	88	76 ·8	82 ·4	11 ·2	0	0	E. N. E. and N. W.
April ,,	29 ·899	29 ·884	29 ·891	90 ·1	79	84 ·5	11 ·1	3	3	N. E. and N. W.
May ,,	29 ·860	29 ·792	29 ·826	85 ·8	76 ·1	80 ·8	9 ·1	28 ·5	15	E. N. E. and S. E.
June ,,	29 ·766	29 ·760	29 ·763	80 ·8	74 ·1	77 ·5	6 ·7	23 ·60	24	N. E. and W. N. W.
July ,,	29 ·857	29 ·807	29 ·832	80 ·2	73 ·2	76 ·7	7	26 ·70	25	N. W. and W. N. W.
August ,,	29 ·872	29 ·807	29 ·839	78 ·6	72 ·7	75 ·6	5 ·9	19 ·20	28	N. W.
September,,	29 ·880	29 ·798	29 ·839	80 ·5	73 ·5	77	7	9 ·95	19	W. N. W. and S. E.
October ,,	29 ·900	29 ·850	29 ·875	83 ·4	74 ·3	78 ·8	9 ·1	3 ·35	7	W. N. W.
November ,,	29 ·937	29 ·854	29 ·895	85 ·1	72 ·5	78 ·8	12 ·6	1 ·30	6	E. S. E. and E. N. E.
December ,,	30 ·003	29 ·913	29 ·958	86 ·3	68 ·9	77 ·6	17 ·5	0	0	S. S. W. and E. N. E.

* No Observations made during these two months.

Statistical Table for the Province of Malabar for the year 1836.

	TALOOKS.	Number of Villages.			Total Population.			Number of Ploughs.	Cattle.	
		Mouzah or Hobelies.	Umshoms.	Mouzarah or Dishooms.	Males.	Females.	Total.		Bullocks, Cows and Buffaloes.	Sheep and Goats.
1	Cavay	9	22	158	32,012	28,781	60,793	4,042	26,643	272
2	Cherikul	11	21	118	31,344	30,084	61,428	2,738	17,817	260
3	Tellicherry	17	27	218	35,200	35,211	70,411	6,267	28,197	839
4	Cartenaad	11	31	146	30,241	28,830	59,071	3,916	20,647	439
5	Koormenaad	12	35	265	41,009	37,519	78,528	5,052	32,693	180
6	Calicut	12	31	128	41,548	37,152	78,700	3,692	16,345	485
7	Ernaad	10	27	164	37,871	33,279	71,150	7,759	37,785	841
8	Shernaad	11	23	116	36,569	31,894	68,463	6,543	27,628	862
9	Betutnaad	13	30	194	43,081	38,899	81,980	8,147	29,552	1,055
10	Kootnaad	7	21	162	28,925	27,253	56,178	5,000	17,760	956
11	Chowghaut	7	24	165	44,449	40,363	84,812	3,366	17,134	1,164
12	Nedinganaad	17	42	334	49,196	46,858	96,054	12,061	47,862	2,097
13	Wolloowanaad	12	27	199	33,744	30,266	64,010	13,468	49,477	1,232
14	Palgaut	12	33	126	51,248	47,518	98,766	8,837	31,176	2,301
15	Tunalpooram	11	24	51	31,017	29,655	60,672	6,441	25,385	1,433
16	Wynaad	9	16	67	16,470	16,977	33,447	5,384	29,439	46
17	Cochin	0	0	0	4,114	4,346	8,460	0	0	0
18	Mahe Hobby	1	1	4	992	1,030	2,022	75	390	18
19	Neilgherry	0	0	39	2,984	2,987	5,971	403	6,867	291
	Total	182	435	2,6,54	5,92,014	5,48,902	11,40,916	1,03,191	4,62,797	14,771

Statistical Table for the Province of Canara for the year 1836.

TALOOKS.	Extent in square miles.	Population.			Cattle.					No. of ploughs.	No. of estates.	No. of Beriz Pattahs	No. of Moganies.	No. of Villages.	No. of Houses.	No. of Devostanums, Banksalls, Warehouses, Shops, &c.
		Males.	Females.	Total.	Cows.	Bullocks.	She buffaloes.	He buffaloes.	Total No. of Cattle.							
Mangalore.....	240	50,183	47,221	97,404	15,727	19,555	2,735	16,546	54,563	14,512	7,356	7,356	29	196	18,394	2,119
Bekul.....	1250	65,252	63,816	1,29,068	35,416	45,147	7,776	16,480	1,04,819	16,785	11,914	11,914	24	242	24,111	1,489
Buntwal.....	1650	52,724	47,682	1,00,406	31,723	40,652	8,776	15,755	96,906	18,554	11,519	11,519	38	394	20,589	3,209
Oodipsy.....	400	36,934	34,177	71,111	16,471	21,553	2,110	11,928	52,062	13,024	6,924	6,924	16	126	13,051	1,093
Barcoor.....	450	37,058	35,833	72,891	18,511	22,804	2,591	13,336	57,242	15,548	5,961	5,961	17	135	12,803	1,313
Cundapoor.	432	37,669	35,098	72,767	17,273	24,542	3,398	9,823	55,036	12,004	6,297	6,297	24	190	14,437	1,591
Honawer.....	832	38,733	34,287	73,020	16,450	17,482	5,463	4,804	44,199	8,556	7,337	7,337	16	192	13,178	1,327
Ankela.....	450	29,560	26,543	56,103	11,481	13,722	2,530	4,114	31,847	6,162	7,026	7,026	10	139	10,424	1,016
Soopah.....	2052	19,022	17,232	36,254	14,542	15,712	6,331	5,365	41,950	7,047	6,192	6,192	11	267	8,446	750
Sonda.....	900	22,710	19,044	41,754	15,512	16,705	6,468	3,594	42,278	4,058	4,305	4,305	19	327	8,370	706
Bilghi.....	256	9,594	7,751	17,345	5,403	5,945	2,050	623	14,021	1,720	1,437	1,437	13	74	3,345	250
Total....		3,99,439	3,68,684	7,68,123	1,98,509	2,43,819	50,228	1,02,367	5,94,923	1,17,970	76,268	76,268	217	2282	1,47,148	14,863